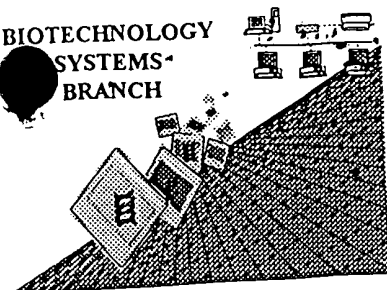


5000

## RAW SEQUENCE LISTING ERROR REPORT

BIOTECHNOLOGY  
SYSTEMS-  
BRANCH



The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 09/914549  
Source: PCT 09  
Date Processed by STIC: 09/27/01

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.  
PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:  
1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,  
2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY  
FOR CRF SUBMISSION QUESTIONS, PLEASE CONTACT MARK SPENCER, 703-308-4212.

FOR SEQUENCE RULES INTERPRETATION, PLEASE CONTACT ROBERT WAX, 703-308-4216.  
PATENTIN 2.1 e-mail help: [patin21help@uspto.gov](mailto:patin21help@uspto.gov) or phone 703-306-4119 (R. Wax)  
PATENTIN 3.0 e-mail help: [patin3help@uspto.gov](mailto:patin3help@uspto.gov) or phone 703-306-4119 (R. Wax)

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE CHECKER VERSION 3.0 PROGRAM, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW:

### Checker Version 3.0

The Checker Version 3.0 application is a state-of-the-art Windows based software program employing a logical and intuitive user-interface to check whether a sequence listing is in compliance with format and content rules. Checker Version 3.0 works for sequence listings generated for the original version of 37 CFR §§1.821 - 1.825 effective October 1, 1990 (old rules) and the revised version (new rules) effective July 1, 1998 as well as World Intellectual Property Organization (WIPO) Standard ST.25. Checker Version 3.0 replaces the previous DOS-based version of Checker, and is Y2K-compliant. Checker allows public users to check sequence listings in Computer Readable form (CRF) before submitting them to the United States Patent and Trademark Office (USPTO). Use of Checker prior to filing the sequence listing is expected to result in fewer errored sequence listings, thus saving time and money.

Checker Version 3.0 can be down loaded from the USPTO website at the following address:  
<http://www.uspto.gov/web/offices/pac/checker>

# Raw Sequence Listing Error Summary

## ERROR DETECTED

## SUGGESTED CORRECTION

SERIAL NUMBER: 09/914 549

ATTN: NEW RULES CASES: PLEASE DISREGARD ENGLISH "ALPHA" HEADERS, WHICH WERE INSERTED BY PTO

- 1        Wrapped Nucleics  
    Wrapped Aminos  
The number/text at the end of each line "wrapped" down to the next line. This may occur if your file was retrieved in a word processor after creating it. Please adjust your right margin to .3; this will prevent "wrapping."
- 2        Invalid Line Length  
The rules require that a line not exceed 72 characters in length. This includes white spaces.
- 3        Misaligned Amino  
    Numbering  
The numbering under each 5<sup>th</sup> amino acid is misaligned. Do not use tab codes between numbers; use space characters, instead.
- 4        Non-ASCII  
The submitted file was not saved in ASCII(DOS) text, as required by the Sequence Rules. Please ensure your subsequent submission is saved in ASCII text.
- 5        Variable Length  
Sequence(s)        contain n's or Xaa's representing more than one residue. Per Sequence Rules, each n or Xaa can only represent a single residue. Please present the maximum number of each residue having variable length and indicate in the <220>-<223> section that some may be missing.
- 6        PatentIn 2.0  
    "bug"  
A "bug" in PatentIn version 2.0 has caused the <220>-<223> section to be missing from amino acid sequence(s)       . Normally, PatentIn would automatically generate this section from the previously coded nucleic acid sequence. Please manually copy the relevant <220>-<223> section to the subsequent amino acid sequence. This applies to the mandatory <220>-<223> sections for Artificial or Unknown sequences.
- 7        Skipped Sequences  
    (OLD RULES)  
Sequence(s)        missing. If intentional, please insert the following lines for each skipped sequence:  
(2) INFORMATION FOR SEQ ID NO:X: (insert SEQ ID NO where "X" is shown)  
(i) SEQUENCE CHARACTERISTICS: (Do not insert any subheadings under this heading)  
(xi) SEQUENCE DESCRIPTION: SEQ ID NO:X: (insert SEQ ID NO where "X" is shown)  
This sequence is intentionally skipped  
Please also adjust the "(ii) NUMBER OF SEQUENCES:" response to include the skipped sequences.
- 8        Skipped Sequences  
    (NEW RULES)  
Sequence(s)        missing. If intentional, please insert the following lines for each skipped sequence:  
<210> sequence id number  
<400> sequence id number  
000
- 9        Use of n's or Xaa's  
    (NEW RULES)  
Use of n's and/or Xaa's have been detected in the Sequence Listing.  
Per 1.823 of Sequence Rules, use of <220>-<223> is MANDATORY if n's or Xaa's are present.  
In <220> to <223> section, please explain location of n or Xaa, and which residue n or Xaa represents.
- 10   ✓   Invalid <213>  
    Response  
Per 1.823 of Sequence Rules, the only valid <213> responses are: Unknown, Artificial Sequence, or scientific name (Genus/species). <220>-<223> section is required when <213> response is Unknown or is Artificial Sequence
- 11        Use of <220>  
Sequence(s)        missing the <220> "Feature" and associated numeric identifiers and responses.  
Use of <220> to <223> is MANDATORY if <213> "Organism" response is "Artificial Sequence" or "Unknown." Please explain source of genetic material in <220> to <223> section.  
(See "Federal Register," 06/01/1998, Vol. 63, No. 104, pp. 29631-32) (Sec. 1.823 of Sequence Rules)
- 12        PatentIn 2.0  
    "bug"  
Please do not use "Copy to Disk" function of PatentIn version 2.0. This causes a corrupted file, resulting in missing mandatory numeric identifiers and responses (as indicated on raw sequence listing). Instead, please use "File Manager" or any other manual means to copy file to floppy disk.
- 13        Misuse of n  
n can only be used to represent a single nucleotide in a nucleic acid sequence. N is not used to represent any value not specifically a nucleotide.

PCT09

RAW SEQUENCE LISTING  
PATENT APPLICATION: US/09/914,549

DATE: 09/27/2001  
TIME: 12:13:28

Input Set : A:\SEQUENCE LISTING.txt  
Output Set: N:\CRF3\09272001\I914549.raw

4 <110> APPLICANT: Poustka, et al.  
6 <120> TITLE OF INVENTION: Protein (TP) That is Involved in the Development of the Nervous System  
9 <130> FILE REFERENCE: K 3008  
C--> 11 <140> CURRENT APPLICATION NUMBER: US/09/914,549  
C--> 13 <141> CURRENT FILING DATE: 2001-08-24  
14 <150> PRIOR APPLICATION NUMBER: PCT/DE00/00583  
W--> 15 DE 199 08 423.8 - *Erroneous text*  
16 <151> PRIOR FILING DATE: 2000-02-28  
W--> 17 1999-02-26  
19 <160> NUMBER OF SEQ ID NOS: 39  
21 <170> SOFTWARE: PatentIn Ver. 2.0

Does Not Comply  
Corrected Disclosure Needed

# ERRORED SEQUENCES

5290 <210> SEQ ID NO: 39  
5291 <211> LENGTH: 81369  
5292 <213> ORGANISM: DNA  
E--> 5293 <214> Homo sapiens  
W--> 5295 <212> TYPE:  
5295 <400> SEQUENCE: 39

Invalid field 213 response: "DNA"  
should be in field 212.  
FYI: there is no field 214.  
Also each prior filing date must appear in an individual field 151 preceded by respective individual fields 150.

1. Edit field 213 delete 214
2. delete erroneous text
3. field 150 is required before each 151
4. Header 151 must precede each prior application date.

5298 gatcagactt tgaagagtgt ttgtaccatg ctaaagtta cagaatttat tctgtctctt  
5300 tgagggtgca ttgcaaatcc aggctagagg gagagatacc agttaggana gtacagcaat  
5302 actctactgg gaaatggtga ggtgtttcgt gaagacaatg gcaacacaga tgaagacatg  
5304 cagatggagg aaataaagat ccagttgagc ttgttgccca gttggataga ggttgagggt  
5306 atgcatgatg gagcaatcta ggtttttgtc ttgggtaggt gtttccatga tagtactcag  
5308 aatgaatcat atagttgtac aggttgaatc ccacccatgt ttgcacaata gactgactgt  
5310 ctagctgaaa tccagatgac actctgtatg ctaagctatg cttcatggaa ctgtataaag  
5312 gcacttgcta cataggctag tggcagatct ggaagtaacc tatatggtat ataggaaatg  
5314 aggtggcttt tgtataaatc ctacagataa atttcatttc ctgactctat tattttgact  
5316 catgttagcc caagaagagt attcagtagt tcatatccct gaaggtaaga cagagtagta  
5318 ttagattcac tatttggcaa ataaaaggga tcaagtccta agatcaagct gatgaatcaa  
5320 cacctcatag gatattgtccc aaccaattat atggcttccc ctataaataa aatctagtgc  
5322 tcttctctgg agaggaacag tgaagaatat cataacctat gctacaaact gcttgagtag  
5324 gagctacttc tctccaaggc tttatatcat tcattctggc aggccctctt gtttgttctc  
5326 accagctcct gggaaattta tttctcctct agtgatataa aagctctctg tttgagatga  
5328 agggctgccc agtttatcag atctgtatta gtctgttctc aggctgctaa taaagacata  
5330 cctgagactg agtaatttat gaaggaaaga ggtttaattg actcacagtt ccacatggct  
5332 ggggaggcct cacaatcatg gcgaaagact aataaggagc aaagtcacat cttacatggc  
5334 tgcagacaag agagcatgtg caggggaact gctctccata aaaccatcag atcttgtgag  
5336 acttggtcac tattacaaga acaacagaca ggaaaacccg cccctcaat tcaattacct  
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5340 tgggtgggga taccgcaaaa ccatatgaag ttctttcttt gttactgggt accatatcca  
5342 ttctgttgag gttctgagcc ttccagttta ctgtaactcc tctatctcct gtctgtgcta  
5344 agactcagtg acctctctct gccttgcttc tgctttgtcc tgacctttc tgtgcatgca  
5346 ctactctag tttgcccacc tgagggtgaga gatggtccag attagcaaca acaatctgtg

RAW SEQUENCE LISTING  
PATENT APPLICATION: US/09/914,549

DATE: 09/27/2001  
TIME: 12:13:29

Input Set : A:\SEQUENCE LISTING.txt  
Output Set: N:\CRF3\09272001\I914549.raw

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5350	gaaacagaga	ccaggggtgtg	ggaagtaagg	tagtagcctg	agagcagctg	gcagtgtttt	1620
5352	agacctggag	ggaggttagg	tcatcagcaa	tgaggagact	gcctggaaaa	tcctagaaaa	1680
5354	ttaagacatc	tggtcaggca	aggtcatatc	accagcacac	ttcccttttc	aagttgaatc	1740
5356	cctttcctct	gttaagagga	ttcaagtgtc	tttcttgcac	tttgtcttct	cttctatatc	1800
5358	catgcttgca	atataaggag	acagcagttg	gctgtttgtg	ctagaaaaata	taaatggcca	1860
5360	ttttgaaagc	atgccagaca	ggatctgcgg	caagttttca	atgttactgc	tgccatctgt	1920
5362	tgttcttcag	tgctgggatg	tgaatctctt	ggcaaacatc	tctctaattc	tgaactatct	1980
5364	ttcaccoccca	tctagagata	ttcaacttact	gaagtgcctt	tttaaagcaa	tgttcctcac	2040
5366	caaggcgatg	ttctgaatgt	tttaaaatgg	aagaatctgg	aatgttttta	ttataatata	2100
5368	ttttgtatat	cccaaagcaa	aaatcaattt	cttcatgggt	aatacttttg	taattttgtt	2160
5370	tttaataata	ttttcctttt	aaatataaga	aatattttat	tgaattaata	ctttaatgta	2220
5372	gctgtttcaa	gtaagataaa	acagaacaga	ttactgtttt	caaccttggt	cacagtttagc	2280
5374	tctgtaacta	agttgttgag	ctttatctaa	gcttttttat	ttttacataa	cgtttccctt	2340
5376	ttcacttaac	cttgaaatta	tagtaatttg	ggaacttcta	ttcctctgaa	agagaaaagct	2400
5378	aatgccaaag	atatttcaag	ggagaaaaga	ggttttttaa	aggagagaca	attcagctca	2460
5380	gacttaatag	ctgtgattgc	tattttattaa	gcagaacgcc	tataactaaa	ttctcagata	2520
5382	tcacaaaaaac	agcctgtaca	ttctcaaaaag	tgaagattac	acattttcta	agttaaggta	2580
5384	aaagttttgt	ctctgtagca	tcttactgat	ttctatcttc	tcattctgcc	ttataaatgt	2640
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5388	tagaaacaca	gctaagtttt	gtaattttgt	tttttaaaaa	ttaaaaattt	aaatataaaa	2760
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5392	ttaaaaataa	tctctccaca	cactgtagta	tttaaaacat	catgatatta	ctataaaaaca	2880
5394	tcaacaaata	gggcagtgga	aaacatggta	atcactaaaa	atgctcacat	gtcatatatt	2940
5396	aagacttgat	aagtaaacca	caataataaa	tagaaaagaa	atagttgtct	aaaaagggat	3000
5398	tctcaccttt	caaaccttac	cataaaaatg	gaatataaaa	gaaggaagag	gaggagaaat	3060
5400	caaattatat	cataaaattt	tctgggcaaa	aatattacag	aagaaaataa	gaaagattta	3120
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5404	aacaaagaaa	cagatttggtg	aaatatttga	aactgggttt	tttttagcat	ttaaaaatgt	3240
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5420	cttacaatag	ttagaaaatt	gtaaaatgct	ttatgcatct	taaaaataaa	attgttgaat	3720
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5440	taaaattact	ttatctcctt	tgtgatttca	gccattttta	aaaaaataga	tgtttctact	4320
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## RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/914,549

DATE: 09/27/2001

TIME: 12:13:29

Input Set : A:\SEQUENCE LISTING.txt

Output Set: N:\CRF3\09272001\I914549.raw

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5450	ggttgttctc	tttactcaaa	acccacatgg	tattaatggt	agtctctatg	aatatttcat	4620
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5520	gtaaaatcac	aagcaagcta	gttacttcc	agatacaatg	ggagtactgg	tattgggtaa	6720
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5526	tntcacatcc	aggacatgct	gangcaagag	atagggtccc	ataatctttg	gcagctctgc	6900
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5540	gaagctgcca	aggtttgggg	cttgcaccct	ctgaaaccac	aggctgagct	ataccttggc	7320
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RAW SEQUENCE LISTING  
 PATENT APPLICATION: US/09/914,549

DATE: 09/27/2001  
 TIME: 12:13:29

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5548	cttggggatt	aacactggct	ccttggtact	tatgcagatt	tctgcagcca	gctgaatttc	7560
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5560	gtccttattg	tttatatcac	tataaaaatt	tttgtcaaag	ccattcaaca	agtctctact	7920
5562	ccaaactttc	ccacattttc	ctgtcttctt	ctgagccctc	caaattgttc	cagcctctgc	7980
5564	ctgatacaca	gtcccaaagt	tacttccaca	tttttgata	tcttttcagc	aatgccccgc	8040
5566	tctactggta	ccaacttact	ttgttagtcc	gttttcacac	tggtgataaa	gacataccca	8100
5568	agactggaaa	gaaaaaaagg	tttaattgga	cttacagttc	cacatggcta	gggaggcttc	8160
5570	acaatcatgg	caggaggcaa	aaggcatttc	ttacatgatg	gcagcaagag	aaaatgagga	8220
5572	agatgcaaac	gcagaaatcc	ctgataaaac	catcggaact	tgtaagactt	attcactacc	8280
5574	actaggacag	tatgggtgat	accacccccca	tgattcaaatt	gatctccaac	cagggtgcctc	8340
5576	ccacaacaca	tggaatttat	gggaatacaa	ttcaagatga	gatttgggta	gggacacaga	8400
5578	gccaaactat	atcacatgga	tttcttatac	ttttgctttt	aataacacaa	acaaaaaaat	8460
5580	acatcattaa	aagggttagaa	gtgagaagggt	gtttttatgg	aaatcaaaaa	taatattacc	8520
5582	ttagtgaaca	gtattcttat	gattgtagtt	gaattagaga	gcagaatata	tctagaagat	8580
5584	tcagtagtaa	gcatgtttct	tcgattaatg	gaaaatttga	atagcctagc	tgattgagat	8640
5586	tgaggttact	attaaatgcc	tgaagtataa	gagttgggtg	tttatgtaaa	caaaatatct	8700
5588	gtttttacatg	tacatgtgta	agtaggactg	ttgagcccca	gtaacatgaa	atatcaaaga	8760
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5592	aaaattacct	acaaatggca	tttccctcaa	atcaatttta	aatcttcaga	atttcatttt	8880
5594	aataattggt	tagttaatat	ttcagaatcc	ctcatcataa	aaagcaggca	aaaggcaaaa	8940
5596	gtccttgaat	gtataacaca	tttgttttca	aacaagcctg	cctctaactg	tgaatccagg	9000
5598	agtgaatcca	gaactacaaa	ttactaaga	ttggcccat	cgagttactg	aacgttaaaa	9060
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5606	atgcaactgc	taccacagtc	ttcctgatca	ctgatctgtt	ctaaatctct	atagcatttt	9300
5608	tccttttctt	aaatgttgca	taaaataaac	cataccttat	gtggcctttt	gaatctggca	9360
5610	tctttaactt	aatgcgcttg	aaattaatct	atgtcatttc	atgtatcaat	ggctcaatct	9420
5612	ttttaattgt	taagaaaaaa	tgtatgctgg	gataaatatc	tttctaaatg	agtttttgtt	9480
5614	cacaatgctg	agtgtttgtt	taggatagag	tcctagaaat	ggtatcacta	ggtcaaacat	9540
5616	tcaaataatt	ttaaaatatt	tgatacatat	tgccaaataa	tctcaaattt	tttaccataa	9600
5618	tacattttatg	acagtatggg	ataaatgtgt	ctttcttata	ccaactgaca	acattaatga	9660
5620	taatacataa	aataattcttt	gctaatttga	tgggacagaa	atgttatatc	cttattagca	9720
5622	ttttattatt	gtggttgaat	gactgtactg	tacagccaga	gatatttggg	tcaaaaatcca	9780
5624	tcttcattat	ttactgtatg	tgaaaattta	ggtgagctat	ttaatctctt	gatgccttag	9840
5626	tctcctaatac	tataaagtgg	ggataattgt	accaatcata	ttaggttcct	gtgagaatta	9900
5628	actgaattac	tatagaaaat	gcttagaatg	gtatctagtc	accaggaagg	actctctctg	9960
5630	tattacttgt	ttattatcta	acacgtttta	ttattaatga	agctcagttt	cgttatatgc	10020
5632	ttgggatatt	tgaaaactttt	cttagtgaat	tttccaataa	aattatttgg	ctatttttct	10080
5634	atggacaagt	tggtattatt	cttactgggt	tgtttcagggt	tcagttagta	agaattttta	10140
5636	ggattttcta	tcacatttta	gcaaactttt	tctgcatttt	atcttttttc	tttcagataa	10200
5638	tgtttgcaaa	atgtaaaaaa	aacaaaagggt	ttcttcatca	agttgggtatc	tttatctttt	10260
5640	ttattgcttt	gtgatttgaa	aattcttgtc	ctgagaacca	aaatatatat	ttgatgaaat	10320

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/914,549

DATE: 09/27/2001

TIME: 12:13:29

Input Set : A:\SEQUENCE LISTING.txt

Output Set: N:\CRF3\09272001\I914549.raw

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5646	ccaggtttct	attgtttctt	ctgtttcctt	tataatgctt	tttctgaagt	tatttttctt	10500
5648	agacttaaat	attagtataa	tattatcata	gaggaaaaaa	tatctgttag	ctatgaataa	10560
5650	aaggctttca	tcttattgtt	gcatttaatat	attttaaagt	agagagcata	cagattagca	10620
5652	aagaaaaagt	ataattgcct	ttttttatag	ttgacatgaa	catgtataaa	gaaaaaccaa	10680
5654	aaaaatcaat	aaaacaacta	gaactttatta	gtgaatttag	caagatcata	gcatacaaa	10740
5656	ccaagattca	aaattccatt	ttattttatct	actaacaaaa	aatatttgaa	atttgaaaat	10800
5658	ttaaataatgc	cattttacaat	aacatcaaaa	tattgaacaa	taaagtattt	aggaatttat	10860
5660	aaaatgaaat	ctcctatacc	aggaattaca	gaccattgct	gaaataaatg	aaagaagacc	10920
5662	aatatatgtg	aagagatact	catttgtgga	ttgagagaca	atattgttaa	agtatcagta	10980
5664	tttcccaa	taatcaatag	attcaatata	atggtgaaca	gaacaccaga	agatgttctg	11040
5666	tcgaagctga	caagctattt	ctataattca	aatggaaatg	caaaaggcag	tcactgccaa	11100
5668	caccagcatg	gactgtctgg	gttccagtag	gttacttcac	tactgcctct	tctgtcagcc	11160
5670	acatcacgac	agctgcccag	aagccagaga	aactcctcac	acctggccca	ctgctgcagc	11220
5672	taccagcatc	caggcaagcc	accatcagcc	cactggtaac	tgccaacaga	ggtaccactg	11280
5674	tacactaccc	tggggaacaa	agataggcat	gtagtacgac	cacctctgcc	accactaggg	11340
5676	cctgaagcct	ggcccacctg	acactgcagt	cctcagcaca	gcttcacac	agcttctgtt	11400
5678	aataaccaca	ccctaacctt	ccaaggaaat	cacaaatgtc	actgacactg	tttgtagcca	11460
5680	aagaaatcat	agagagacta	cattactgca	cacaccata	atcaaagcca	cagtacccta	11520
5682	tccagacaac	atcacaggta	tatctaaagg	aaaaaatatt	cccatatgaa	agcgaattca	11580
5684	aatataggaa	gaagcgactg	ttacaacaga	tatgcagata	aagcttcaac	aatatcctac	11640
5686	attcaaccag	aagaaagaat	ctcagaaggt	aaagacaggt	cttctgaaat	aatctagtca	11700
5688	gacaaaatta	aaagagaata	atcaaactct	tcctgacatt	tgggataaca	ttaaagtgc	11760
5690	caaataatag	aattatagat	acccctgaga	gtgaaaagac	aaagaaaaga	ttagaaaacc	11820
5692	cacttaatta	aataatatat	gaaaacttcc	taagtctagc	aagagtttta	gatatttggg	11880
5694	atgcaggagg	ctcaatggtc	cccaggccga	taaaacgcaa	aaaggtctta	tacacagcac	11940
5696	attacaatca	gactgtttta	agtcaaagat	aaggaaataa	ttctaaaaac	agcaagagaa	12000
5698	agtgtatgat	aacctatgaa	gtaaacctta	tcagactgac	agcaaatttc	tggcagaaac	12060
5700	tttacaggcc	agaaagaata	ggacaatata	ttcaaagtgc	ttaaagaaaa	aaaaaactat	12120
5702	cagccttaaa	tactatagcc	cacaaaatta	tccttcataa	atgaaggaga	aataaaaggt	12180
5704	ttcccagaca	cgaaaatgct	gaggtagttt	gttactacta	gactggacct	acaataaatg	12240
5706	ctcaaggagg	gtctggaac	tggtagtgaa	aggacgacat	ttatcatcat	gaaaatacat	12300
5708	gaaagtataa	aactccctgg	taagcaacta	aagggaggta	tcaaagtgtt	ccaccagaga	12360
5710	aatctaacta	accacaatga	caaacaataa	gggaaaaaga	aaggaacaaa	aatatataag	12420
5712	acaacaaata	aacaacaata	taacagggaag	cctcacatat	cagtaatcac	tttgaatgta	12480
5714	aatgaattac	attctccacc	taaacgttat	gaaatgcctg	aatgataaaa	ctatatgatc	12540
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5720	aattagatca	tacagacttt	aagtcaaaaa	gagtaaaata	aaaaagacaa	aggatgttat	12720
5722	tatataatga	tgagattaac	ccagcaatgg	gaaataacaa	ctctaaatgt	atatgcattc	12780
5724	aacactagag	aactcagatc	cacaaagcaa	atatttagacc	taaagagaga	aatagactgc	12840
5726	aatacagtaa	tagtggagaa	cttcaacact	ccactttcag	tattagacag	ataatctagg	12900
5728	caaaaaatca	accagtaaat	tttagattta	aactagattt	tagaccaaat	ggaccttaaca	12960
5730	gacattttaca	aaacattcca	tccaaccact	gcaaaaatgaa	atttgtgtca	tcagcacatg	13020
5732	aaacaatgtc	caagatagac	caccatatgt	taggccacaa	atcatgtctc	agcaattttt	13080
5734	taaaagtgtg	aatcatatca	catatcttct	cagaccactg	ttgaataatg	ctagaaatca	13140
5736	atgccaaagaa	taacgttggg	aactatacaa	atacatgcag	attaaacaac	atgttcctgg	13200
5738	ttgatcactg	ggacaataag	gaaattaagc	tgaaaatcaa	aaaattcttg	taacaaataa	13260

RAW SEQUENCE LISTING  
 PATENT APPLICATION: US/09/914,549

DATE: 09/27/2001  
 TIME: 12:13:29

Input Set : A:\SEQUENCE LISTING.txt  
 Output Set: N:\CRF3\09272001\I914549.raw

5740	agattgaaac	ataacatatc	aaaaccagt	gcatacagca	aaagcagtc	taagagggaa	13320
5742	gtttatagca	ataaatgctt	acactgaaaa	agtagaaata	ttttaaaatt	agcaacctaa	13380
5744	caatgtgcct	gaagaaacta	aaaaatcaag	aacaaatcaa	acccaaaatc	agcagaagaa	13440
5746	acacaaaaat	aaagatcaga	aaagaactaa	atcaaataga	gactaaaaaa	atacaaatga	13500
5748	ttaacaaaac	taaaatttgg	ttattcaaca	agataaataa	aattgataaa	ccgctagata	13560
5750	gactaaacaa	ggaaaaagaa	tatccaaata	aacacaatca	aaaacgataa	aggagacatt	13620
5752	acaacagatg	ccacagaaat	aaaaaggatc	atcagagact	attattaaca	actatatgct	13680
5754	gaaaaatgga	aaatatagag	aaatagataa	attcctagaa	acttacaacc	taccaagctg	13740
5756	ttgcatcagg	aagaaataga	aaacctgaac	atatcagtaa	tgattagcaa	aattgaatca	13800
5758	gtaataaaaa	acatctccca	actcttttaa	agctttggac	caaatagcac	cacagcctaa	13860
5760	ttctaccaat	catgcaaaga	agaataccag	tcttcttgat	gctattacaa	taaatcagag	13920
5762	gaaggaaattc	tctctggctc	attctacatg	accagtgtca	ccttgaaacc	aaaacctgac	13980
5764	aaggacacca	caaaaaagaaa	actacaggcc	aataaccatg	atgaacacag	atgcaaaaat	14040
5766	cattaacaaa	atactggcaa	acggaatcca	acagcacatc	aaaaaaataa	tataccacaa	14100
5768	tccagagggt	ttgtatcaag	gatacaagta	tgactcaatg	taaataaatc	aataaacatg	14160
5770	ataagcatct	tcacagaata	taagacaaat	gaatatatga	tcactctcaat	agatgcagaa	14220
5772	aaaaattttt	gataaatttc	aacatctctt	catgaaaaaa	atctctaaaa	ctcagcatag	14280
5774	aagaaacata	cctcaatata	ataaaggcca	tatgtgacaa	actcagagct	aatatcatat	14340
5776	agaatggggc	aaagtttaaa	gactttcctc	taagaactgg	aacaagacaa	ggatgcaaac	14400
5778	tctcaccact	cctatccaca	tagtactaga	agtcctagcc	aaaacaatca	gacaagcaaa	14460
5780	agaaataaaa	agtatctaaa	ttgagaagag	caagtaacat	tgttcctctt	tgctgatgat	14520
5782	atggttttgt	atctggaaaa	tactaaaaac	tccagcaaaa	acctcttaga	tttgattaat	14580
5784	taatttagta	aagtttcagg	atacaaaata	aaaatacaaa	agtcagttagc	atttctatgc	14640
5786	cccaataata	aaatagctag	gaaagaaatc	aagaaagtga	tcccatttaa	attagctaca	14700
5788	aaaaatttaa	atacctggga	ataaatcaag	gaagttaaag	atctctgcac	aaaactacaa	14760
5790	aacactgatg	aaagaaatta	aggattaaac	aaacaaattg	agaaacatcc	catgtttatg	14820
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5794	tgcaatttct	accaaattac	caatgtcata	tttcatagaa	ttagaataat	cctaaaatta	14940
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5818	cttgatagca	gagtacagtg	actacagtta	acaaaatgta	ttatactcag	gtgatgaaca	15660
5820	cctaaataact	tgatcactat	gcaattatat	acgtgtaaca	aaatcactat	gcactatata	15720
5822	cgtgtaaaaat	taaatgcgta	caaaataaaaa	taataaaata	ctaattccagt	atcattcact	15780
5824	gacaatgtta	actcagggtg	ataggcatta	agtcaatact	actataagaa	ccacttcttg	15840
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5830	tacatgtcac	caaaaaatat	attcaaattt	ccaataaata	catgtaacaa	tgttcgacat	16020
5832	cgtttagtcat	cagagaaata	caaaataaaaa	tggtaatgag	atactactag	ataggctttt	16080
5834	acagagactg	acaataccaa	gtattgacaa	ggatatggag	caactgaaat	tctcattcct	16140
5836	tgtggtgaaga	atgtacaatt	atataaccac	attgaaaaaa	caagttttca	gtttctttat	16200



RAW SEQUENCE LISTING  
PATENT APPLICATION: US/09/914,549

DATE: 09/27/2001  
TIME: 12:13:29

Input Set : A:\SEQUENCE LISTING.txt  
Output Set: N:\CRF3\09272001\I914549.raw

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5842	tgtgtatatt	tgtgttttta	taatttatat	gcataatctt	ctgtgaaaag	atactgtatg	16380
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5846	tataaatgta	tttattgggt	ttccacgttg	caaactaaat	aatctacgtt	ggctaattta	16500
5848	aggaattaaa	ctatagttaga	aggttctcat	ttattgggat	gattagaacc	agcctttttg	16560
5850	caggctatta	gcgaatcata	gcactagggc	ttcactgcta	cctccactga	cacctctgac	16620
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5854	ttgctagata	atagaaaaga	atcaaatgac	tctgccacat	tgcttgccag	aagattgttt	16740
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5870	acacatgggg	cttatgggaa	ctacaattca	agatgagatt	tggtggggga	cacagccaca	17220
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5878	aagcaagtta	gctacttctt	agatacaata	gggtcacagt	cattgggtaa	atacacacat	17460
5880	tccaaacggg	aggaattgac	caaaaccaag	gggtcacagg	cctcatggag	gtccaaaatc	17520
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5922	cccacatctt	cctatctttt	tctgaggcct	ccaaactggt	ccaacttctg	cctgttacct	18780
5924	agttgcaaag	ttactgccac	atcttctgggt	atctttacag	cagtggccca	ctcctggtag	18840
5926	caatttacca	tatccattta	ttctcatgct	gataataaag	acatacccaa	ggctgggtag	18900
5928	tttataaaga	aaaaagaggt	ttaattgact	cacagttcag	catggttggc	aaggcctcag	18960
5930	gaaacagaat	catggtggaa	gggaagcaaa	cacatcctcc	ttcacatggt	ggcagggaga	19020
5932	agaatgagca	aaacggggga	aaaaccctta	taaaatcatc	agatctcatg	agaactcact	19080
5934	ctcttgagaa	cagcatgagg	gtaaccatgt	ccatgattcc	attacctccc	aacgggttcc	19140

RAW SEQUENCE LISTING  
 PATENT APPLICATION: US/09/914,549

DATE: 09/27/2001  
 TIME: 12:13:29

Input Set : A:\SEQUENCE LISTING.txt  
 Output Set: N:\CRF3\09272001\I914549.raw

5936	tcccatgaca	cgtgaagatt	atgggaacta	ctacaattca	agaggagatt	tgggtgggga	19200
5938	cacagccaaa	ccatgtcagt	catgatatga	gaaattatca	aattaagatg	tagggaaggt	19260
5940	ttttaaaga	tttgagcaac	cacaaatgac	agatatgtgc	tatagtagtg	caaaatacca	19320
5942	ttttgctctt	attaaaaata	taattgttct	tgataatctg	aattataaat	gtcatggata	19380
5944	attatgatgc	attatgctct	cagcagctaa	aacttcaagc	aaaatacaca	cctagagagc	19440
5946	aatcagcctt	aacaataatt	ctataaat	aattttcttt	atttctgata	attacatttt	19500
5948	agttgacttc	atatgtgatc	taaatacatt	accattattt	tggacttatg	atgtagctct	19560
5950	tgaagtacat	atatgatgta	gctcttaaag	tacatataga	agagcagata	aagtatcagt	19620
5952	tcaccatttc	ttttagtatt	gtgctttcat	gatgaatatt	ctcatcaatg	tacagattat	19680
5954	ttgcaggagc	cttttaaata	catgtgtcca	ttttatgaga	cttagctttt	gtctgtatat	19740
5956	aatgtgttta	ttcagtggtc	atggattaat	ttgagagagc	acagggtatg	gtatctttac	19800
5958	agcagtgccc	cactcctggc	accaatttac	tgtattagtt	tattctcatg	ctactaataa	19860
5960	agactatata	tcacaataaa	ctgagaacca	gctggtaaat	gagagaactg	tgggtccacct	19920
5962	tttcattgtg	gagttctcat	tttcttagc	ttatgctgct	tattcaacac	tatttctgca	19980
5964	taatctaata	cattcactaa	atgaagggtc	tgtgttagcc	tccacatgat	attaatacag	20040
5966	cctattttaat	ttatccttct	ttagattaaa	aataaataag	tagtcatgtg	ccacagaatg	20100
5968	acacttcagt	catttgggtc	ttgaaggacc	acatctatta	ctgtgggtcca	ataagattat	20160
5970	aataacatat	ttttcctgta	cattttcatt	gttctgatat	gttttgatac	ataaatgctt	20220
5972	accatcgtgt	tagagtggcc	tgcagtattc	agtacagtaa	catgctgtac	acctaggagc	20280
5974	aacaggctat	accacatacc	ttagggtgat	agttagggtta	taccatctag	gtttgtataa	20340
5976	gtacactcta	tgatgttctc	acaatgaaca	aaatcaccta	atgatgcatt	tctcaaaaca	20400
5978	tgtccctgtc	attaatacag	tatgtaacaa	tacagttagt	acaatatgta	atacatgact	20460
5980	atattcagaa	ttttagctat	ttctcttata	tttcaaattg	attttcttat	gcactgtgtg	20520
5982	gcacgggcat	ttcatttttag	taaccacagt	ctgggaaagg	agaagtcttt	gaaggatggt	20580
5984	gagcaagggt	atgacatggc	cagatgtgaa	tttttgatca	gtgactccat	gttagcagat	20640
5986	aaagttgtat	tgggaaagat	caaaagcatg	aaggccagat	aagaggatac	tgtatgttat	20700
5988	catggatgga	aatgtgaggg	atggcaggag	agatgctatg	attgaatgaa	tctcaatatt	20760
5990	cttgggtgatc	aaagaataat	gagactcatc	caataagact	ctgtgaatga	ttgaatgtag	20820
5992	ttcctaagct	aggaggaaga	atgaggaatg	attttctggt	tcttgactac	agcacaggtt	20880
5994	tttgattttt	agaacaaaga	ataaatttgt	acatgcttta	tgattcctgg	ttgaattttt	20940
5996	aaggataaaa	aagtccagctg	taatattatt	ctttcctgat	accatgcagt	atttgtatca	21000
5998	gtgatcttat	tcattccaca	cacattcttc	ttgaacctgg	acactgctct	agacactgat	21060
6000	tctttccaaa	tatcagataa	ggttattctt	acgtagacct	tcagttcata	taaatatgat	21120
6002	tttcccaaaa	tgtgaaataa	gtgacttttc	ataagatatt	ttttaaaga	atgtcttaata	21180
6004	aataaattgt	gaatgttgca	tggaaatgta	ggtgacttgc	attgtgcatc	ctgtgtttga	21240
6006	ttcactgctc	ttgcatgtct	tgccttttagc	tgggatgaca	gcagttcagt	gagcagtggt	21300
6008	ctcagtgaca	cccttgataa	catcagcact	gatgacctga	acaccacatc	ctctgtcagc	21360
6010	tcttactcca	acatcacctg	cccctctagg	aagaatactc	aggtgagaat	taccaccttt	21420
6012	ctttttccag	tgtttctgcc	agctttttcc	ccaaaattac	ttaatattag	attaagggtat	21480
6014	agcacaagcc	cttaatccaa	aattattaca	gaaactggaa	aatgcagaga	taataaggac	21540
6016	tccctttgcc	actcctgaac	cctgaagcat	ctttcatctt	agtcctttct	aaagccacaa	21600
6018	cccttaggag	gagcaacaat	gtgcactgca	gccaaatttg	aataaacaga	agcagcttat	21660
6020	atatatatat	atatatatat	atatatatat	atatatgata	tacattacat	atttatatat	21720
6022	atgtaatat	tgtgccatat	agcctgggtg	tatagttatc	tatacaata	tatttatatta	21780
6024	ttgttaatat	atagagtata	taaatatcta	tttatataat	agatatattat	atatattaaa	21840
6026	tatctattta	tataatagat	atttatatat	attaaatata	taaaaatata	taacatataa	21900
6028	tagatatata	ttttatatat	tatatataat	tatatattata	tatttaatat	attaatgatg	21960
6030	aattactata	tttgtataga	taactacacc	accaagctat	atgggtgtgta	tatattaata	22020
6032	tataatgtat	aattctatat	taatatataa	gtaacatata	aatacttaata	ataatatata	22080

RAW SEQUENCE LISTING

DATE: 09/27/2001

PATENT APPLICATION: US/09/914,549

TIME: 12:13:29

Input Set : A:\SEQUENCE LISTING.txt

Output Set: N:\CRF3\09272001\I914549.raw

6034	ttcaattgat	tacaatctaa	ttcagaaaaga	tttatgttgc	catatctctc	cttacaatat	22140
6036	cgatatgttt	gtttaaaaat	ccagcaatta	ttttcatagt	ctaatttttag	atagttcttg	22200
6038	attaatttta	tatgatctct	gaaatatatc	actggatctg	ttgtgaatga	taaatcaaaa	22260
6040	atgaaaaatg	gacattacat	cattaagttc	tagcttgtct	tactacttct	tatgacattt	22320
6042	gatatagaaa	atttctacct	ttctgtagcg	tttaattggg	gttttctgca	tgtattttatt	22380
6044	ctgaaattct	ctaataatctg	caagtgggaa	ttatgtggct	aaaattaata	aaatgtaagt	22440
6046	gaaggtaaat	caaaatagaa	tctttggatt	tatccagtta	tctgaaagta	catttcattg	22500
6048	ccttaattca	cactttataa	atttttctac	ataaagtttt	tctgtaatat	ttgtctttat	22560
6050	agctgaggac	agattcagag	aaacgctcca	ccacagacga	gacctgggat	agtcctgagg	22620
6052	aactgaaaaa	accagaagaa	gattttgaca	gccatgggga	tgctggtggc	aagtgggaaga	22680
6054	ctgtgtcctc	tggacttcct	gaagaccccg	agaaggcagg	gcagaaagct	tccctgtctg	22740
6056	tttcacagac	aggttcctgg	agaagaggca	tgtctgcccc	aggagggcg	ccatctaggc	22800
6058	agaaagctgg	aacaagtgc	ctcaaaacac	ccggtaggct	tgtcgtttgc	cagctgttat	22860
6060	gcaaaagtgc	tttactttat	tgtttccatt	caatctttgt	tttctctaac	aatagcattt	22920
6062	ctaaaatacc	aaattcttat	ccatattaaa	catggagtca	aatagttaaa	tagtttttct	22980
6064	gtctacgttt	cacaaactcg	tcatagaagc	ccaagtaggg	cctatatcta	ggcattctct	23040
6066	ggaaagcctc	ctcataaact	aggggtactg	gatgccttac	cttgccagag	ttatttcagg	23100
6068	taatggggaa	ataagattag	gttgctaaag	caacagttaa	gtttttttgt	ttttgttctg	23160
6070	cgttcttaat	gaaagtttgg	aattttttaca	ctaaatatgc	cactgaattg	cactacagac	23220
6072	tctgagagga	acaagcaatg	acactaatca	attggaatgc	tggagatttg	aaatattgtc	23280
6074	tgtgtattag	acttcatgaa	agaagagaat	gaaatagttc	ttcaaaattg	tgccatactt	23340
6076	tttttaaaaa	gactctcccc	gtatttttta	aataatgcct	aattataaat	agtgccacct	23400
6078	gaagcactaa	ttaacagggt	actccaaata	taatcatctc	acagatattc	aatgaatttc	23460
6080	tttttctagt	aattagcttg	atagggttaa	gtgttacctt	tttaaaaaga	gttgcaaaat	23520
6082	ataagacatt	aacaaatagc	aaaacatatg	ttttcatttt	atctcttcca	tctctcataa	23580
6084	tgtttcttct	gacagccaaa	ttttttagc	tatgcactca	gtcctctcaa	tatatgagat	23640
6086	ttttgatcta	agccaataca	tttaggaagg	gaaataatat	aaagaagcat	tcacatttta	23700
6088	cacattgttt	cacgaagtgt	ggtgatatca	aactctacag	gcacatatat	ttgtgtattt	23760
6090	ctccttaatt	agggaaaacc	gatgatgcca	aagcttctga	gaaaggaaaa	gctcccctaa	23820
6092	aaggatcatc	tctacaaaga	tctccttcag	atgcaggaaa	aagcagtgga	gatgaaggga	23880
6094	aaaagcccc	ctcaggcatt	ggaagatcga	ctgccaccag	ctcctttggc	tttaagaaac	23940
6096	caagtggagt	agggatcatc	gccatgatca	ccagcagtgg	agcaaccata	acaagtggct	24000
6098	ctgcaacact	gggtaaaatt	ccaaaatctg	ctgccattgg	cggaagtca	aatgcaggga	24060
6100	gaaaaaccag	tttggaacgg	tcacagaatc	aggatgatgt	tgtgctgcat	gttagctcaa	24120
6102	agactaccct	acaatatcgc	agcttgcccc	gcccttcaaa	atccagcacc	agtggcattc	24180
6104	ctggccgagg	aggccacaga	tccagtacca	gcagtattga	ttccaacgtc	agcagcaagt	24240
6106	ctgctggggc	caccacctcg	aaactgagag	aaccaactaa	aattgggtca	gggcgctcga	24300
6108	gtcctgtcac	cgtcaaccaa	acagacaagg	aaaaggaaaa	agtagcagtc	tcagattcag	24360
6110	aaagtgtttc	tttgtcaggt	tcccccaaat	ccagccccac	ctctgccagc	gcctgtggtg	24420
6112	cacaaggtct	caggcagcca	ggatccaagt	atccagatat	tgccctaccc	acatttcgaa	24480
6114	ggtaaggatg	tataaaatga	tgtgtgaaaa	atataaagga	taaaatgtgt	ttagacacat	24540
6116	acattacata	taaatgtgtg	tatatatata	ttttaaatat	gtataaggta	tataatatat	24600
6118	atatcttaga	attcttttaa	gtacacagtg	agctctatga	agcttatcat	ataaacagct	24660
6120	agcaaaaaaa	atagtttctca	ttttgagaaa	cagtcaaact	tcaaagtttc	actgtcattg	24720
6122	tgatactagc	aacacaaaca	tctaagagac	ttaaaagctg	atggtaatac	ctaagtgtag	24780
6124	tgataaggca	aagtaatagc	ttgtaaaatt	tctatagatt	tccattcctc	cttttcacat	24840
6126	taaaaattaa	aaccaaatag	gttttcatga	cttttggcat	tcatttccag	tgtcattttc	24900
6128	ttgctggctc	ttaatgagtt	ggtgatcata	aatgtagatg	aagttgtttt	ccttgtaaca	24960
6130	gattccattg	gacagattta	tacagtgtca	tatcttgaca	cattaaagac	aatcaagata	25020

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/914,549

DATE: 09/27/2001

TIME: 12:13:29

Input Set : A:\SEQUENCE LISTING.txt

Output Set: N:\CRF3\09272001\I914549.raw

6132	tgacataatt	tgaactatt	ccagtgtttg	gtacagtatc	acaactgaag	agtgggctaa	25080
6134	gcttttctaac	tcttcatctg	ctttctttga	catgactctg	gtaaggatca	tgacttggtt	25140
6136	tctgttctctg	gattgttttt	gggtgttaaat	atgtgaagtt	ctgctctaag	atatcactgt	25200
6138	ttttaaatac	ccatgtgttt	ttaagtggta	ggaaaataaa	tgcaagttaa	aattggggac	25260
6140	aaatatctaa	acctctctga	gtctgttttc	tcatctgcaa	aatggtagag	tggtggtttat	25320
6142	agttcattat	gggttcaata	tttttaagt	ttgtttttat	tctgttgact	aaacccagaa	25380
6144	ctttgatatc	ttggaaagga	aagattttga	aacattttat	ttacaataaa	gcaatttcag	25440
6146	atactgatt	gtttgaaaaa	cctaaaggct	ttattcctcc	gtagtaatat	taatgctgca	25500
6148	gaactgtctt	tttaaaatac	tgattctcat	tggaagaat	gaattatggc	gtatagggag	25560
6150	agtaaataatt	tctgtttctt	aagtaaaagc	caatagtgcc	ctcctgtggc	ccattaccta	25620
6152	tgaacaatt	tctcatatc	gtcataaaat	atttcactgt	aggaaatatg	gatttcattg	25680
6154	caactcaatt	agtaatcatt	atgccattac	ttcatatcat	tgtatttcca	tatttacata	25740
6156	aatttgattc	taccatctgc	ttcattttaca	aaactaaaat	gttttctgaa	ctaaactcca	25800
6158	aaatctaaca	gcaccagctc	tgtttccaat	cactattaaa	aaatgtattt	gaatagcact	25860
6160	ggcaactgac	ataaaaccct	ttggcctctg	ctggggaaaa	tacagacaaa	ctgacttggt	25920
6162	gccgacaata	tcaatattgt	ttccaaccaa	ctgctccctg	acagtgactc	agaccaccag	25980
6164	atactcaaca	caactcccta	aacttgcttt	aagcgttcca	tctagatttt	gaataaactg	26040
6166	tttaaaaatt	taaaaataaa	aaaaaaagag	aagagctcat	ttaagtgttg	tctatcgaat	26100
6168	gcgtagaagt	tgtttcatta	taatggttct	gtaaataggt	aacagcaagt	atggtcaaac	26160
6170	tactgacttt	gagtgaaggt	ctcatgatca	cttaaatatt	gaaaaccagg	ggttttcatg	26220
6172	tttgacttac	ttttgttcca	cccacttccc	ctctttccct	agtagcagct	cagtactgac	26280
6174	ctacccttat	atgagagatt	ttctgcactt	gataaagaag	tccaagctta	taaaagttca	26340
6176	ttaacataga	gacaggaagt	gctttgtagt	tcagtacatc	aaagcacact	tggtctctgt	26400
6178	tactgtaacc	cgaaatatta	aatgtggata	ttagcttctt	ggaacaactg	aagtgtttat	26460
6180	ttgtttttct	tttaggttgt	ttggtgccaa	ggcaggtggc	aaatctgcct	ctgcacctaa	26520
6182	tactgagggt	gtgaaatctt	cctcagtaat	gcccagccct	agtaccacat	tagcgcggca	26580
6184	aggcagtctg	gagtcaccgt	cgtccggtac	gggcagcatg	ggcagtgtctg	gtgggctaag	26640
6186	cggcagcagc	agccctctct	tcaataaacc	ctcagactta	actacagatg	ttataagctt	26700
6188	aagtcaactg	ttggcctcca	gcccagcatc	ggttcaactc	ttcacatcag	gtggtctcgt	26760
6190	gtgggctgcc	aatatgagca	gttccctctg	aggcagcaag	gatactccga	gctaccagtc	26820
6192	catgactagc	ctccacacga	gctctgagtc	cattgacctc	cccctcagcc	atcatggctc	26880
6194	cttgtctgga	ctgaccacag	gcactcacga	ggtccagagc	ctgctcatga	gaacgggtag	26940
6196	tgtgagatct	actctctcag	aaaggtgagc	tttctggag	gcattgataa	catcttcccc	27000
6198	ctcttccctg	cactatgcct	aacccccacc	ccattaaatt	cccttgattt	cactgtgagt	27060
6200	gccccgggtg	aaaaagatgt	aagactgatg	aaaccgggcc	tttcatttgc	tctcattacc	27120
6202	aaattttacag	aggaatagaa	tcattaaagg	taggggtgagt	ggataatttt	gttaatatga	27180
6204	atgcatacat	ttatacccag	taggcaatgt	gaataaaaatt	caaggaatgt	atttagatat	27240
6206	tgaatgaggt	ctcctgaaga	catttttaag	atttggtcta	agcttcagaa	caacactagc	27300
6208	tccttatgat	gacttaagca	ttttgaaaga	ccaaattgaa	attattctat	agttatgctc	27360
6210	agagcaatat	gttaaatgtg	ttccatttgt	acttctatga	aaaaatagca	gatggattgc	27420
6212	tgggaaatcc	tagttggcct	ggttaaaaaa	aaaaaaataa	tcaattgtca	gccatgaatc	27480
6214	attagagaaa	attatagtgt	cagtggcatt	ttcaatagac	tgcttaaaaa	gtaatcatat	27540
6216	tacaaagtgt	ttctcattgg	ctttatatat	atatataaac	ttaaagtaga	ggacatagca	27600
6218	aggcattttct	tacctaatat	gcttactgtg	aagcatccct	tttgagcaaa	atcactctaa	27660
6220	attttctcct	caaagtgatc	ctctcttgat	tatactgtac	tgactcttac	caccaggaaa	27720
6222	atgtcttaaa	accacttctt	tttcttgata	aatgcaatgc	tatttgtctc	ttgacataag	27780
6224	taaagcttta	aacatggtct	tggccacatg	tggaagaaa	tactgggtcac	gtaaaatacc	27840
6226	tgatatatct	ttctatgtct	tcccctgttt	tttttatttt	ttttttattt	ttatttttta	27900
6228	actctgatat	tgatgatggc	atttattttc	tagaccttca	gccttactcc	cggaatgata	27960

RAW SEQUENCE LISTING  
 PATENT APPLICATION: US/09/914,549

DATE: 09/27/2001  
 TIME: 12:13:29

Input Set : A:\SEQUENCE LISTING.txt  
 Output Set: N:\CRF3\09272001\I914549.raw

6230	tttttaaac	tcaattaaag	cccttagcta	gacactctct	gcattacgcc	agtttcccct	28020
6232	taatgtagga	tgtcccaatt	tgaaattccc	cattttctct	tgactttgta	aaatacaaaa	28080
6234	cccagagcaa	aacattgctt	ctttccctct	ttacttccta	cttgccctaac	aatgagacag	28140
6236	ggacagccgt	gcaaattggg	ctttccgatg	ataaagtaat	tttaacacta	actaaaatat	28200
6238	tgggttttcc	tatgggtggc	tgctaattac	aaaatacatt	tttcctccta	aagaaaaaaa	28260
6240	ctgggccaa	gcaaacagct	cagtgatagc	aaataaaatg	taaccatttc	cctatggttt	28320
6242	tgctgttata	tgctattata	gacagcatac	gtaaagacca	gtaagggttc	atttttccac	28380
6244	ctaaaatgtc	gggttccctg	taaaatcttt	gattctagtt	tcagcacttc	taaggtaaat	28440
6246	gggcatcttc	acatgtcatt	tataaaactt	ctaataaatg	aattatatta	aaatagataa	28500
6248	acaacctata	gttttaatat	atgtatccta	gattgtatgc	tcatatgtaa	ggattctaaa	28560
6250	tatcaacttg	ataaccaaac	caaacatagt	gcaaataagg	tatcatttat	taaccacaac	28620
6252	caccttccac	aaaactggtc	attttttaat	tattaagata	atctgcaaca	agttggccat	28680
6254	ttagccatca	gcctatttct	tcagcattta	gacattaatc	ccagattcag	aaataaagtc	28740
6256	aagtaactat	ttataaccaa	gtaacattca	aatcaaaact	agatgaaaga	ttggttagtt	28800
6258	gcatagctat	aaccaaagt	cagttttaat	attttactct	aatctatatt	ttactgaag	28860
6260	tcaataaaat	tttactatg	gaaatacact	agaaaatatg	caatttctta	ttctttttaa	28920
6262	gcagatttat	ttattgtaca	tgttcagtc	ttgaaatagg	ccaattttat	ttatgttatg	28980
6264	ttatgttatt	tatttgtttt	gaaatggagc	ctcactctgt	cgctcaggct	ggagggcagt	29040
6266	ggtgccatct	cagctcattg	cgtcctctgc	tacccgagtt	caagcaattc	tcatgcctca	29100
6268	gccacctgag	tagctggggt	tataggagcg	gaccaccatg	ctgggcta	ttttgtattt	29160
6270	ttttagagag	tgacgtttca	ccatgttggc	caggctggtc	tcgaactcct	gacttcaagc	29220
6272	gatctaccct	ccttggcctc	ccaaagtgtg	gggattacag	gtgtgagccg	tggcaccagc	29280
6274	ctgaaatagg	ccaattttta	aaatgggagt	attcctacat	taaaatggcc	aaataaagac	29340
6276	tttttctaaa	ataaacttta	aactaatttt	ggataaatat	gttttgcctt	tgagccttaa	29400
6278	taaaatgcat	taatgaatat	taagctgtaa	aaagtacatg	ttaactacat	agctatagtg	29460
6280	tataatatta	atattaatta	gtgccttcca	gtaaattact	agattaaaa	aaattttaat	29520
6282	ataagacact	gagctttttg	ttttcttgac	aatagaactg	caagcaatag	caaattgctc	29580
6284	taatcctttc	acgtacattt	aagaaagtgt	atgacctatt	gaagagaaaa	gtagatctag	29640
6286	tgggtgatac	tggcttcatt	atgggttaatt	aattgatcag	tagaatgtca	gaaatgctaa	29700
6288	gaaaacccaa	gaactacacc	agagagaaaa	tgtgttaatg	taaattttta	ggcaagttaa	29760
6290	ttagcgatat	ataataaaga	tgtatataag	ttcatgattt	acctgtttgt	ctacaatttt	29820
6292	agatgatttt	ttgatactca	tatttaaatc	ggtagctttt	cctatagatt	ttaatttttg	29880
6294	tttaaatccc	tcttcgttaa	attaaataaa	ataataaaat	acacttttta	acagttttct	29940
6296	cttctgcagc	tgctctaggt	cattgggtggc	cattgagcca	taactagtct	atatttgttt	30000
6298	tgggtttttg	ttcatgtgtc	tgactcaact	aaatttttaa	ataatttgta	gtaaccaact	30060
6300	ttgcaaattc	tgggtttgtc	tttaaatgtc	agatctggca	acgctgcctt	gacatttctg	30120
6302	cctagaaact	attggctcta	ggcagtcagt	gtctgtctgc	ttcagactgt	tgactgaaat	30180
6304	ccccattcgt	tttcatgccc	tatctggccc	ttgctggcat	atgagtttgc	aacctttggt	30240
6306	gattttgcaga	aattgtctat	gttagaaaa	cattaatatc	tagattcaaa	catatttcta	30300
6308	aataaagctt	taaattatta	tggttaacttt	aaatgtattt	attctaattt	ttttcattaa	30360
6310	attgctcttc	atcatataaa	tatataattt	ttatacaact	ggatgagttt	ggcagaagaa	30420
6312	taccaacttt	tcataattct	tgtggcatta	aacttttaact	tgtacacatg	gaaataaata	30480
6314	atccttaaaa	tgacttatga	ccacataaat	gccttagcac	atgtggttca	tatttggaga	30540
6316	tttctcatat	tgtttcaata	taattttatt	tgtttgttta	tccacagtac	ttaagaaaac	30600
6318	ttctatagtc	aacatatata	ctgtaactgg	cctctacaca	gtataagcaa	ttaccttaca	30660
6320	tggctattac	cgataaagtt	aaagtgtgat	aaagcctttg	gatgcttttg	atttcagtgc	30720
6322	taaataatgg	agtacacata	gaagaaaaca	tttttagcttt	ggtttgagtg	atcaaatttt	30780
6324	aggtcagcct	ttttacattc	atgttatatc	atccccatta	tgcgtatcct	gtgtatttaa	30840
6326	ttttgatcat	ttgatgtcct	aaaggaagaa	agctataatt	ctgcaatttt	aattaatttt	30900

RAW SEQUENCE LISTING  
 PATENT APPLICATION: US/09/914,549

DATE: 09/27/2001  
 TIME: 12:13:29

Input Set : A:\SEQUENCE LISTING.txt  
 Output Set: N:\CRF3\09272001\I914549.raw

6328	acacttttgc	tatccacatg	ccagagatta	taaaagaaat	ccctaaactt	gtcccaacta	30960
6330	gttggtgata	tcctcttcct	gtatttttag	agaggccatt	tcttattttc	tctagacata	31020
6332	gcttttcatt	ccttcttggt	accaattgtg	aattccctta	aatagagatg	ataaaaattta	31080
6334	tagcctttta	aataccta	ttatgatttc	taaaagatgg	tatagcttaa	tttcattaaa	31140
6336	atattcaaat	aaatgatact	agaatcaatt	aagttttaag	caaacattca	tatatctttc	31200
6338	ttcacatgtg	taaatgggaa	ataaacatgc	ctttttatta	aaaataattt	gaagacaaaa	31260
6340	gataagtatt	aaacaacggt	ttataccatc	tctgtcaatt	ggaagtgtgc	actctaactt	31320
6342	agccagagca	gatctatctc	attttgcatt	tgatatcata	gcaaaagtct	aatcagttgc	31380
6344	atagggaaag	aaaaactaag	atagtattta	atcaatagga	ttcagaggaa	aattatgcta	31440
6346	atgtgattta	atctattttc	tagtaatcct	atcactaaac	tgctattgaa	ttgtactgca	31500
6348	ttagaaagga	actcaaata	gtgtgacggc	aatggacatc	ttgtcacctt	tagttggcct	31560
6350	ttttcaatga	gttaagcatt	atatgtgtgt	taccaaaaaa	ttatttttta	tagttcagag	31620
6352	aaccattttt	gttggatgtg	taatttggaa	gttttgttta	cattatgtcc	ttaggggttt	31680
6354	tctttgtttt	aacagcatgc	agcttgacag	aaatacacta	cccaaaaagg	gactaaggta	31740
6356	tatattcctc	tcagcacaat	tgctacctct	ctgttgttat	gtaaactttg	tgtgctgtct	31800
6358	ctcttccttc	tttgtttgtt	tgcaatgtag	cacatgacat	tgaggacgaa	atcactttta	31860
6360	attttgcatt	tttctctggc	ccgaacagtt	ggtgagatag	ccccttaggt	agagatacta	31920
6362	gtagagattg	aggctgtctc	tcaaattaaa	taaattccaa	tgtgaatata	actattttga	31980
6364	agaaataata	ctaaacaaac	aaacaaacaa	aacaaaaaca	aacaaacaaa	aaacttgtcc	32040
6366	caggcattac	ttttttgggg	gcagcaactt	tggtagaatg	cagaactcac	ttcaacaaat	32100
6368	taaaataaaa	ttactcttc	taacttttgc	ctattagagt	catatgcatg	caaatattca	32160
6370	aaacccatgc	agtctacaga	tgtgggcagt	taatgttgat	aggttgaagg	atgctacaat	32220
6372	ctgaatcaaa	gaaaacatat	tttcatcatc	acaggacaaa	tgtgtgaatt	aaggtgtgat	32280
6374	ttttatagaa	tccttttgc	aaaatctcaa	aattgtttta	atttctattt	tgagggggta	32340
6376	ctgctatcag	atcaatttaa	atctgaatta	atctaataatc	atttaataat	ctcaaaataa	32400
6378	ttattccatc	cataataaaa	aataaaaata	aaatttaact	tatggccatc	ttttactgtg	32460
6380	tacttttata	tgaggaagag	atagaatgat	ctactaaatg	aggtataaca	ctgtatgtgt	32520
6382	atgaaaagtt	ggctaatttt	ggtgctaaga	atttacttac	aaaaagaaaa	agaatatact	32580
6384	tagtttggtg	aaacactgaa	taatggcgaa	actaggtctt	tctccattat	ttttttctc	32640
6386	tccaattttt	cagcaatagc	aaatagctgg	caattattcc	atgttaatat	tttgatccag	32700
6388	aaatttatgt	tccagtaaag	cgagcacatc	tcctctctta	tttttgaat	ctaggcatga	32760
6390	tgtcaagtgg	cagtttaaca	aaagaactgt	ttttctttta	aaaaaaaaaa	aaaaacaaaa	32820
6392	gctgccaata	tgtattccat	ttccctatgc	cttctgtgac	catccttcat	ttcccttggc	32880
6394	cctggccca	caactgtctc	cattttagtg	ccatgttttc	accctcttta	catcctttct	32940
6396	tgccctgtgc	ttttgagttc	tcaattaaact	tggtgtgtctg	ctcattgctt	atgatttcca	33000
6398	actgcataat	tgatagaagc	ataattttct	cctcaaaacc	ctttatctta	ttttttttcc	33060
6400	ctatgtgatt	caaacagatg	gcgtaagatc	atctggaaga	actgagcaat	tataattaga	33120
6402	ttcaatctgt	ttgaaattgt	tcattctgaa	tagtaacctc	ctctgaattg	ttttcctgtc	33180
6404	ctggcattgc	cttgcccttg	tagatgtgct	taagtgtcat	agctgtgctg	ttttgcagat	33240
6406	ataccccatc	atctcggcag	gccaaccaag	aagagggcaa	agagtgggtg	cgttctcatt	33300
6408	ctactggagg	gcttcaggac	actggcaacc	agtcacctct	ggtttccctt	tctgccatgt	33360
6410	catcttctgc	agctggaaaa	taccactttt	ctaacttggg	taaaatattc	taaaatattg	33420
6412	attttgtttt	gtttctttca	ccaccctctc	tcacagaaac	cctggaatct	ctccataaca	33480
6414	caacacgttt	tcattttaaag	ggagggataa	aagcacttta	acagtacctt	tcatttgtgt	33540
6416	cattgtttac	tcttcacaga	aaaatctcca	aacattatgc	tatttattgc	tcatgacaaa	33600
6418	tgcttaacat	agattaatac	tgtgggtgtt	ttctagtcta	ggctccagag	gctcagaaag	33660
6420	ttcacttgac	ttgaaaaagt	cttaccatta	ctaagggttc	aaggcagtaa	ccagttcaga	33720
6422	acatctgact	ttaatcccag	gggcctttcc	attccattta	agaatcctct	taaaaaacag	33780
6424	gaaggcatct	ccttattttat	ttgtctgaaa	tattaaaaca	tccttaaaac	aaaattagta	33840

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/914,549

DATE: 09/27/2001

TIME: 12:13:29

Input Set : A:\SEQUENCE LISTING.txt

Output Set: N:\CRF3\09272001\I914549.raw

6426	atctttt	gta	gaaaatagaa	acaattagga	agaaaaaaat	atgtaattcc	atgactcaaa	33900
6428	gttaacttct	tttaacactg	ttaaagttaa	aactccttaa	aattcataca	agaatttctg		33960
6430	ttaagacaat	actctgaaca	ttttcaaata	gatacaatga	aaaataaatt	accaacttag		34020
6432	tcatgtgggt	actttgtatt	taacatcatt	tgtatgaaat	ataaaatcat	ttgcataaaa		34080
6434	tttcattaaa	agcactctga	gtaacaaaat	aattaaagaa	aactaaacat	gccagatacc		34140
6436	atttaataga	ttcaatgact	ttaaaaatat	atttattttc	tataaagtca	catataaagt		34200
6438	atttttcatta	tttttatggt	aaatatTTTT	attattagtt	tatcagaaaa	acttgtacat		34260
6440	aaagatgagt	attgatacat	aatcttatta	gagccagaga	cgatcattcc	ttctagaaaa		34320
6442	acacatctct	gaatttagga	cggaggacaa	tgaaacaaga	aatttcaact	tataattttac		34380
6444	ctttgtcaaa	ctatcccaga	gcacatcaat	tccatcatga	aagtactctt	ttgacattat		34440
6446	ataaaaaaatt	agtaatagaa	aacacacaat	ccaaaacctt	atatttttcta	aacttcaagt		34500
6448	taatcatcaa	cttctcttag	atttttgaag	acctgaaaaat	aaacataaatt	tcaaataaca		34560
6450	gaactcaaac	accatataca	tttghtaatga	ggcacaaacag	tcaatttttga	gccttgtatt		34620
6452	ttccaggttt	tagctgaata	atcttctactg	ctttcttagc	tttttgccag	tctagtttgg		34680
6454	ggactatttt	gccttactgg	gcctaaacag	agtghtaatat	taaaatatgt	taataagcca		34740
6456	tactgagaat	aagataaatg	caggtttcta	actccttagg	gacacaagtg	gggacaacac		34800
6458	attccatgaa	cacaggtgaa	tgaatgcccc	tagtttctct	gagttggaca	atttcatgcg		34860
6460	atcatttttt	tctctgaggc	caaagtctct	ggtttgatct	tccatgcagc	ttccagaaca		34920
6462	gaaagtgagt	ttactttgtc	tccatattct	ttttctccat	gctcgggaat	cccctgcttt		34980
6464	cctgatccca	ccacaaaaac	ttccctgagg	atgaagcctt	ggctttccag	gcttccaggg		35040
6466	aagcctcgat	tcctggctgg	aggtagttgt	accacactcc	cagagggtta	aatcccataa		35100
6468	acatcatctt	ctgtctttgt	agatcataga	actttttatt	atcatccagg	aagattttct		35160
6470	ttttgaaaca	aggctggaaa	aactttatgt	cagtcctgac	ctgctcttta	atgactgcgt		35220
6472	agaggagat	gccagctta	tccaacttgg	gttgcagaga	ggacagatct	gcagcccctc		35280
6474	ttgccagaga	aaacatcctg	gcacagccac	aatcacaaact	ccattcttct	cccgatagct		35340
6476	cctttgcttt	gaaactcatt	ggttacttct	ccagtgtttt	cagggtctata	ttctccaggt		35400
6478	actccagcac	ctctttccag	ggcttggaca	aaaatacatc	tgtgttggcc	agcatcagtg		35460
6480	ccaaggcagc	agcctccaag	ggctcctgca	cccatggacc	acatccacac	agagaagcac		35520
6482	cttgggtcct	caagtgcctc	cctcttcttc	ccttctccca	aacctgaagc	ccagacacta		35580
6484	aggggtcaaa	ccctcctggg	ccctgagggg	tccaagggcc	tcattacttt	ttcttttttt		35640
6486	cactggaaaa	aaaattctaa	tcatgcacct	acagaagatt	gacatttttc	agtaagttgg		35700
6488	actttccagc	tttcagccag	gacaagactc	aaggctatgt	cttttctatt	gcaacccttc		35760
6490	ccactatatt	gagtagggct	tttagcaatt	gaaaacaatt	attttggtca	tggtttcata		35820
6492	taagctaatt	atttcataat	aaacaccaag	tttttgtttc	ctaaccctata	tagtgataag		35880
6494	agaattttacc	tataatgccca	aagaatgtat	agctttttatt	tgctttaaga	tgcaagttgat		35940
6496	tttttaaaaa	agcgaaaagc	ctaacacttt	aacttcaaaa	aatgaattta	aaatgtttgt		36000
6498	gtaggtcata	ggaatatgaa	aaaattttat	acaacatcta	aaacacaccc	aaatcaccta		36060
6500	aagtgtcata	agcttgctaa	gtacttcatg	tctcctatca	attctttcat	taattgacgt		36120
6502	taatttgatt	agttgactcc	ttcttctatt	tttctcacc	attattattc	tgattaaatc		36180
6504	caccttcatt	attccttagg	aacaaaaaga	ctcaccactt	aactatgtct	gacattgggtg		36240
6506	aagtcgttta	aacttaattt	tcttatctct	tgaatggata	cataatacct	aggttatatt		36300
6508	gtaaagaatg	acggatatag	tgtatgtaaa	gatggagaag	tgtgtaagac	ttgacagatt		36360
6510	ctgccaaatc	attatttttca	ctggaaagca	tgtcttacac	gatcatagag	tagcattcat		36420
6512	cagatatgcc	tgagctttgt	ctacatttta	ttgagtagta	attcgcaaca	cagtaaccac		36480
6514	aggattttat	gtaaaagaca	ttcacagatt	gtgtttttga	aagattgtat	ttttgaagta		36540
6516	caaaactatg	acattgttat	caaggactca	tttaccacaa	atatcaaata	tttgtgcaaa		36600
6518	gataagttta	tgctaagatt	tgcataaatt	aaagttaaca	tggcaactga	agctaacatg		36660
6520	tccatggtca	caatgtgtta	aaaaatgaat	ggttctgtag	cacacttggg	aatgtatttt		36720
6522	attacatagt	tttcagagtt	aaaacacaat	taataaatga	aatgtgaatt	atactttttac		36780

## RAW SEQUENCE LISTING

DATE: 09/27/2001

PATENT APPLICATION: US/09/914,549

TIME: 12:13:29

Input Set : A:\SEQUENCE LISTING.txt

Output Set: N:\CRF3\09272001\I914549.raw

6524	tgacaacaaa	gctctctgta	gagctttaat	gttctaata	attagaaaac	cactgatcaa	36840
6526	atacatccct	tacatttcat	tgctatagaa	accaagtctg	aaagggttaag	tttacctttc	36900
6528	taggatgtgg	gtttccccc	ttaatctatt	gtgggtttata	tcagagatct	ctcagctgtg	36960
6530	tcagacaggc	catgacttaa	gtgacactgc	cctcttgatt	ctcttcatac	ttttccaact	37020
6532	acaattcttt	ctcctggggg	tgctcatctt	aacatagctg	tatcatttat	tgtagacaca	37080
6534	aggtcacttt	tgagagtga	tgggactata	ttaataattg	ttccagggtat	taggtgcaaa	37140
6536	ccctgggcaa	tgcaattcat	cctccatctc	ctccttatat	ttatgtgttt	accaagttgt	37200
6538	ttttcctgta	gacttttttt	tatcctaaac	cctttttcta	tggtctcatt	cacaacttta	37260
6540	attctaattc	ctcaaatcaa	catttcactt	tctgtctgag	acctttttca	gctctaaaac	37320
6542	taaaatccca	tcagtgtgct	agaccatata	gccacctgaa	atcaaagtct	tttcttaagt	37380
6544	tcttttcttc	tatttgtctt	ataatttcat	gtatcatcct	tctctctact	ctagcacaaa	37440
6546	atctgtgtaa	tcaatagtct	tacttgaaac	tgtgctcttc	atattgtaca	ttttcaatag	37500
6548	acaggaacct	gtgattttat	cttcagaata	tctcctacat	ctgtctctca	ttttcaggga	37560
6550	cattgtcctt	gctgaagctt	ttttaactat	agacaattgc	agcagatttt	aaactgatct	37620
6552	tactctgtcg	actcccttat	gtttcaacat	tttcacccat	tggaagggtat	aaaagaagat	37680
6554	attcctgtcc	gtgtcaacat	aatctcatgt	acctctccag	atcttagaaa	cacgtatggc	37740
6556	ttcaaatacag	gcatttgagg	atctttatgc	tgtatgggtt	cagagtggaa	aaaatgattg	37800
6558	attcaaaaac	ataatattta	aagagttttt	attgtattta	cagttcacct	gaacctctgt	37860
6560	tcattgggca	agaaaatgag	tactcttaaa	atgcaataat	aaattaaagt	tactttatta	37920
6562	ttaaatttta	aatatatata	tataacttta	ccttaaatat	gtcctcttgt	tgtcttttag	37980
6564	catcacccat	ttttgatttg	accattatct	tttctgaata	atcagtaaga	tacaggatta	38040
6566	ttattaatgt	tcaaaagtgt	cagtattcat	gttttcttta	ttctttctac	caattaaaat	38100
6568	gtgttaatat	ataaaatttt	tagaaatttt	actataaaaa	atcacaacat	atattagaaa	38160
6570	attaagatca	ctacaatatg	tcataattag	tagactactg	tgagctactg	ccacagtaaa	38220
6572	ctatgggtcg	tgtgtcgttc	ccagcatgct	agccctagta	gaaaccattc	ccattcaaga	38280
6574	aagactaaca	aagtatagtc	tacataaatc	aaaaagtctt	tggtatgaaac	ttcatttggg	38340
6576	aaaaataccc	aatcgctacc	cttcaatttt	ttatgaatga	aaaaatggaa	gaataaaggc	38400
6578	ctctaagatc	cattcaaagc	caggagacac	acaagaattt	ctaaaataga	gagaaacaga	38460
6580	agaggtcata	gttcttgtga	gccatctcat	aacctgggtga	gactcattgt	catgcctcca	38520
6582	tgcatgataa	caatcgctca	gattcatttt	tcatcttgcc	acaagggtta	catgcaggaa	38580
6584	cattaatgtc	aacctgtcac	ttctaataatc	catctaata	tctctaaatt	cgatggatcc	38640
6586	ttttgcatat	ggtgattgtt	aaacaccttt	gcataggaac	agtttctatg	cttttgtagt	38700
6588	caaatacttc	tctaccttga	atcctttccc	atcttctgtt	tcaaccttca	atcttctcag	38760
6590	aatgaactcc	tgtcttctat	tcttttcggaa	gcatagaatc	tcacggtcag	aagagaccac	38820
6592	atctggttca	acccttcatc	tcttatgtaa	aattttatga	catctctagc	ttcttcttta	38880
6594	aaccacacaa	tgacagaaac	tactaaaatc	tagaaataac	acctttgaaa	ttctttcttt	38940
6596	aagagatcaa	ataaaatttt	cctgaatctt	cacctattgt	tcctagttaa	atataatccag	39000
6598	attctacaaa	ataagtcaaa	gttagattgc	atatgacagc	tcttcatatt	taaaacaata	39060
6600	taataaaactc	actagttaat	gtctagctgt	agatgcaaaa	gtagagagtg	acttgggggtt	39120
6602	atttaaaaaac	ccagtcacgc	cagacacatt	ggatcatgcc	tgtaatacca	gcagactca	39180
6604	ggaggctggg	gcaagaggat	cccttgctca	ggagttacag	gctacagtga	gctatgatcg	39240
6606	tggaactgca	tactccagcc	tggaagacag	agtgagaccc	tgtctcacaa	taatagtatt	39300
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6610	acaaataaat	atataatctt	aataaaaagg	tagtggtctt	gccaagatag	tggtctggct	39420
6612	atgcaaatgc	aatttaagac	aaagtgtgta	gccctctttt	tcctaataca	ttgccatatc	39480
6614	tgtttctctt	ctatttgtaa	attcttgtgt	gtctcttggc	ttcgaatgga	tcttatagtc	39540
6616	cttttattct	tccatttttt	agtcataaaa	aaactgaagg	gtagtgattg	ggttatttgc	39600
6618	ccaaagcaga	tggaagcaa	aactaccact	agaagctctt	taccaatttg	tgttccattc	39660
6620	aaaaaattat	ctttgtatgt	cttacatttg	tcttctactg	tatagttttt	cttgttctat	39720



RAW SEQUENCE LISTING  
 PATENT APPLICATION: US/09/914,549

DATE: 09/27/2001  
 TIME: 12:13:29

Input Set : A:\SEQUENCE LISTING.txt  
 Output Set: N:\CRF3\09272001\I914549.raw

6622	tttacaatatt	aactttttctc	cttcttcaga	catctgccct	actggctact	cttgaaatca	39780
6624	gagactgtgt	catattttttc	cttctattca	actacaacat	ctaaaagcag	atctgtcata	39840
6626	gttattaact	taattgaaca	ctcttaaata	gttaggtgta	atttccaatg	cagaagctat	39900
6628	caaaagggtt	tgtaaagtca	aactattccc	tttaaaatct	atcctaatac	tcattaatgt	39960
6630	ttcatcttga	tagagctaag	tattatgtat	tgaaattgta	gaagtacact	tcacttggtat	40020
6632	atctctgcaa	tcatttaggt	aagaattata	caaagccaaa	aagcaaataa	aatatcctcc	40080
6634	taaccctata	gatacgtata	ctaaaatgat	gcacttgcaa	atttgtttaa	tacttcatta	40140
6636	atttaaaca	gagtaaattc	atactgtgaa	ccaagaatag	ggtgacttac	cccaatcttg	40200
6638	ccaccttaaa	cataaacatt	ttaagtcttc	aatgtcctac	agtgtaccta	ctggctgttg	40260
6640	tcactaatca	gaccgaaatg	gtactaatgg	tcactgcagg	ctgaagggaat	atgcttgaaa	40320
6642	gataggcaga	tcctctccct	ctcccttttt	tacttttttc	gcctttccat	cctttcttct	40380
6644	ttttttccaa	tagattgtgc	actttggaga	ttcatatttt	cttccttttc	cattacattt	40440
6646	taaatatgtg	attccttagtc	ctatgcttcc	ttttactcca	atcaataact	ggctctatca	40500
6648	gaggggtgtt	ctgtgtgtta	attcggttaa	taccaggatt	atcaagcaca	gtgccttcca	40560
6650	aatgtgagat	acttctctcc	ggttacctct	gggtttactt	ttcctgtttt	acattgtttt	40620
6652	gagagccagt	acttgtatta	agaagaagtt	tagtgccctgt	gtcacagaaa	aaatcttagt	40680
6654	aaattttgaa	gtgatgtcag	aacaactcta	agccactgac	ggattccaca	gggttttgaa	40740
6656	aatactcggt	agttcccttt	atatcttaag	aggctcctgc	ctgctttctc	atataccagt	40800
6658	aacaaacttg	cttttcttaa	atatgagcat	ttagaatatc	tttctcaatt	tttctgtttt	40860
6660	gctttttattc	caaatttcac	aactatattg	ttttccaatg	tagttgtaca	tacaatcaac	40920
6662	caaacttttc	cttaaattga	tgactaccag	gtgaggactc	tttggaataa	agcaataaga	40980
6664	aaataaattg	ttattaaaaa	ttacagactt	aagatacttc	tttggaataa	taacatgttt	41040
6666	gtgacttttg	accatctcat	catgatatgc	tcactttaaa	cagagtagaa	aatcatttca	41100
6668	tataattaac	tttatgggtg	gctgcagata	ccatgtatgt	tacattgtgt	ttagttataa	41160
6670	aaatgtttat	tatacactat	ttccttataa	tctaactttg	ataataatga	tggtcctaata	41220
6672	catgaactta	catcaattaa	gagcttgaa	tgactgagag	tatttgcttg	gaagcattta	41280
6674	aagcccttct	tgaggaaattt	agatgtttta	tattttactt	tccttttgat	tttgcttttt	41340
6676	ccattaaagt	gattactatt	tttaaagaga	aaaccgaaaa	ctctagaaag	accatctttt	41400
6678	cttcataaca	ggtagcagaa	aacaccatgt	tattacattt	ctagcaagag	cagtagagggt	41460
6680	gactttgttg	ttttgtgtac	tggtgcttta	gaaattgatg	taaggcttcc	cataaacgtg	41520
6682	ccagaggaaa	agagggacgc	aatgggatct	gttattgaac	atttcagagg	cagactctta	41580
6684	ccttaaatag	ggactcacta	tacattcatg	ttttcataag	tattgggatc	atgttcttac	41640
6686	tttctatcaa	cctgctattt	tcacttttca	agcttaagag	taataggctc	tggtgtgttt	41700
6688	gtttttcagt	gagcccaaca	aatttgtctc	aattttaacct	tcccgggccc	agcatgatgc	41760
6690	gctcaaacag	catcccagcc	caagactctt	ccttcgatct	ctatgatgac	tcccagcttt	41820
6692	gtgggagtg	cacttctctg	gaggaaagac	ctcgtgccat	cagtcattcg	ggctcattca	41880
6694	gagacagcat	ggaagaaggt	aagcgttgag	ggggattaaa	gatgaagtca	ctttatttta	41940
6696	accctgagag	ggaaaccatc	gtgtcactca	catcacaaag	attcctgaag	aggaaaataa	42000
6698	actagtgtaa	ttatcatttg	gaaaactaga	agcttgaaga	agttttattc	tgtattatct	42060
6700	tctatttctt	tatgtatttg	gaaatatgcc	agaatttggt	tatatataa	cttggctgta	42120
6702	gaagagttaa	gactaaatct	acttttccaa	tacagaaata	tacataataa	ctattttccc	42180
6704	aggtgcatca	aatatcagag	caaagtgttt	gtttgacatt	ttggttaaag	agccataaag	42240
6706	acacacaaac	cagaaacatt	attttatgaa	aataccacat	gttgctgact	tttattccca	42300
6708	ggaattccct	ctggtgctaa	ttttttatta	tatcatttta	gaattcatat	tgtacctact	42360
6710	tttttgcttt	ataagtcact	atttcttcat	ccaatggcaa	taaaattgtc	accttaacct	42420
6712	ataaataatct	ttatagttat	atagttctat	gtaaatactc	caaataaatc	agcttgaaaa	42480
6714	cctcaggaag	ctgagttgat	gctcaaata	atatattttt	gtaaactgta	gaagctcaaa	42540
6716	tgtcaaattt	aacaataatt	tgagagactt	ttctctttga	tttaataaat	tttttttagta	42600
6718	tccataaaga	aaacttacag	catacatatt	ataaagcatg	tcagctaagg	ataaaataaa	42660

RAW SEQUENCE LISTING  
 PATENT APPLICATION: US/09/914,549

DATE: 09/27/2001  
 TIME: 12:13:29

Input Set : A:\SEQUENCE LISTING.txt  
 Output Set: N:\CRF3\09272001\I914549.raw

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6722	aaagaaaagt	ctccaaatct	tgagacatac	cagagttaa	gtcttcagcc	atccatttac	42780
6724	ttgtggtata	aacttaggca	agtttcttaa	ccttcttata	cctaagttct	gcattctgta	42840
6726	cttcttaggt	ttgtcacaag	gatgaaatat	gagaacaaag	aataattctg	ttccatgatc	42900
6728	ttttcccttc	ctaccttctt	atttaaagta	tcttctgact	gaggggttag	gcagcaatga	42960
6730	aaattgactc	atgtttttca	ggtcaccact	atggattcaa	tatactggca	ttaaatcagt	43020
6732	agagaatagt	tgctattgcc	ttttgcaata	tttaacaaac	cactcagttc	actgtgacag	43080
6734	acagtgaatt	atatccaatg	actccactga	ttttttccat	gtagatagac	aaaatataac	43140
6736	tactctcaaa	tgtaaggacc	ctgctttctg	aaatggttct	gttgctctct	tcacagatag	43200
6738	gcttcttata	atacttttaa	aataatttgc	taagcataca	gatggctttc	tagagtgtgg	43260
6740	cattgacaaa	taaagtgatt	tttatatact	gggaaattct	ggccttcaat	gtatcaggat	43320
6742	taaataatct	gaatttctga	aagctagcct	aagtgggcaa	gatggctttt	ttgtgctcac	43380
6744	gcattgaata	ctgaactatt	ctagttctta	aatggcgatc	tagattcaag	acttattgaa	43440
6746	ctagattgaa	gggactttat	tgatatccta	cctaagtctc	acactgacag	atgaagagac	43500
6748	tgagccacat	gttctaaggt	cataaacaga	aagaatgaga	atgagatggg	ctaattaatt	43560
6750	gtccaccttt	cctatggtac	atcagggtaa	cactttagtt	tacgagggta	ttattagaga	43620
6752	tagaaagaat	ttttttttaa	ataattgact	caaataccaa	cattttgcac	attacataga	43680
6754	gtaatagctt	tgcccaagtt	agaaaactgg	gggttcttct	ttattcctct	tttgaccaca	43740
6756	tctatatact	cagtttttaa	aaggttcttc	ctggtatcct	tcaattccat	ccccatgttt	43800
6758	tcatctacaa	gcctagtga	gctattccag	cgtctctctg	atcaggtctt	aagcacctcc	43860
6760	catatgtcct	tgtagtacc	accatattga	tctcagtagc	aatcacagta	ctctattgta	43920
6762	aatatctttt	aaattattat	cttctctttg	agcttttggg	attttatctt	attttatttt	43980
6764	gtagttccag	gatctagcaa	cagcttgtca	catcgttcat	actcaactaa	tgtttgttta	44040
6766	atgcacaatg	agcagaaata	aacatactac	tccatagtaa	aaagaggatg	aacttttctg	44100
6768	caaataattaa	tcagcaccat	tttatccacc	ttttgggttt	agtacattgg	aagtatagga	44160
6770	gtataaagca	gaatgtccaa	tgttttacagt	gatattttga	aatagataaa	agccagtgcg	44220
6772	acattttccat	tctcaatttc	tctgagacat	caccttgaaa	aaaaaaagta	tttttctctt	44280
6774	cctaaaatta	gtaaaaggac	agtaattcca	cattttataag	agtatgatca	acgcacacaa	44340
6776	gataatgttg	taataacaca	ttagataaaa	gtgcttattt	tctgaaaatt	atatggagaa	44400
6778	aaaaatctga	aagtggacct	ttgttgata	caaataagaa	aaataaggta	catacatatt	44460
6780	ttaaggttcg	aaagtttatg	gcaactttag	tttgggtttc	catgctattc	tattttattat	44520
6782	atgggaattt	actgtagctt	tcaacatgta	cgaacaggcc	tggtagggct	catgcttgta	44580
6784	ggcttctgtc	taataacttg	gcaactgagg	tactttaggg	agtatggatg	gggctcttcc	44640
6786	atgtctcaac	gtcctgactg	ccaaaaaatt	atagcaggct	ggttctcaga	atcttatagt	44700
6788	tagttgttat	tacttaattt	ccctaaccac	ccgttcttta	ctttttctgt	aaaggctgga	44760
6790	atttttgagt	agaccttatt	gttttaactc	tattgttctg	tttgttttct	ccagttcatg	44820
6792	gctcttcatt	atcactgggtg	tccagcactt	cttctcttta	ctctacagta	agtaatggct	44880
6794	gttaagaaaa	agcttgtgct	tttgccatgc	acacagatga	tgaaatagat	cattttactg	44940
6796	tgaacagatc	acattcatct	atgacttgca	caggagtgtg	gtagcaaaat	aacggcatac	45000
6798	tctaagctgc	ccaataccca	ataaagtgcc	agggtctcca	cctgccattc	tttggtcact	45060
6800	tacatgtgct	ttoacttgge	ttttgtgcac	tcatcataat	caatgagtgg	atgtagaatt	45120
6802	cgatttccata	aaacctactg	aggatgact	tggagtctct	gaaaccatgt	atgtagtctg	45180
6804	ctatactatc	atttttagtaa	tgacgagttg	tccatgtttt	gttcttttag	ccgtgactgt	45240
6806	taattgttct	atagtatttt	cttctcattt	tttattttta	agttttattgt	tgagaggatt	45300
6808	atcgaagggt	aaaagcagta	agggtaaagg	gtaaaagcat	aaaagaacca	gagatgtttt	45360
6810	tttttaataa	taccttttga	aagagtgtga	tttttttaac	ttttattttt	attttatttt	45420
6812	attttattat	ttattttatt	ttgagtcgag	gtcttgcttt	gtcaccaggg	ctggagtaca	45480
6814	atgacacaat	catagctcac	tgcaaccttg	aactcctggg	ctcaagttat	ccttctgcct	45540
6816	cagcctgtca	agcagctagg	actacaggca	cgcaccacca	tgccagctca	atttttaaat	45600

RAW SEQUENCE LISTING

DATE: 09/27/2001

PATENT APPLICATION: US/09/914,549

TIME: 12:13:29

Input Set : A:\SEQUENCE LISTING.txt

Output Set: N:\CRF3\09272001\I914549.raw

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6820	caattcctcc	tgcttttagcc	tccccaagt	ctgggattac	aggtgtaagc	cagcacactt	45720
6822	agatagaaac	tttattttatt	aagagaaaaa	taccagtgtt	tcaagttctt	ttgcaaactt	45780
6824	gtgacattat	aattcatttt	tgacaaggag	agtttttctg	tttggtaaat	acaattctat	45840
6826	cttttttaaa	aaagtagcct	acaggaagtt	atattttatg	agtgaagtctt	tttagagcta	45900
6828	ggttaacagt	gaggtatatt	taaaagcagc	ctactgaatc	tcaatgggac	ttgagtacta	45960
6830	tgaataagcc	ttaactcctgt	actgtaagg	tcatgaagag	ttcatagcct	ctgctgtcac	46020
6832	tgatcaactg	agcatcatgg	gcagtatttt	tttcactcat	tatcattagg	ttcaaatgtt	46080
6834	tgtttgaacc	ttctctttat	agattaatct	catatattta	ctgccttaca	tagtcattca	46140
6836	aaatctgact	gttattggca	gaagtaatat	ttttctaata	tctcctttca	atgattaaaa	46200
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6840	gtgcaaagtg	ataaagtggg	gaatgtgtaa	acacacatga	aaaaaacaca	taaaagaaat	46320
6842	atattaagac	ttagtgttcc	tcctgttggg	ccagcactgc	catttgttgg	ggaattgtat	46380
6844	tctgatttaa	accattgcc	tttacatcta	tggtgaacat	caaaagatgt	agcatcatta	46440
6846	ttattctaaa	tacatacaat	aattaatatt	tggtataaagc	taccttcatg	aaacctaaga	46500
6848	aaaactaaat	taaaaagaaa	gaaagaaaga	aaaatacact	tagatagaag	aaataaggctc	46560
6850	tagtgattgg	tagcacaata	gagtgactat	agttaacaat	aatttattgt	acatttcaaa	46620
6852	atagctagaa	aagaagattt	ggaatgttcc	taacaggaag	aaatgatatt	cttcctaaat	46680
6854	gaagaatggg	atattccact	ttcccagatt	tgatcgttac	acagcatatg	tttgtataat	46740
6856	accacatgca	ccccataaat	acatacaact	attgtgtatc	ccaatattaa	agattttttt	46800
6858	gaaaaattta	ttcctcaaga	aaaggatcat	gagtttaaga	aaaaacagat	tactagtcta	46860
6860	ccagtgtcca	gtagaccttt	ctgtgttaat	aaaagtgttc	tgtatctaca	ctatctaata	46920
6862	tagtaactat	gaaccatatg	ttgccattga	ttatttgaag	tatatctggc	aaagagatga	46980
6864	attgactttt	ttattttaat	taattttacat	tgaaatagcc	acatgtgcct	agcagctact	47040
6866	agattggata	gtgcaagttt	atagagaaca	caagggttac	attttagat	aggagtggga	47100
6868	tgtcaaaatg	atgaggataa	ttagaaaagca	tacatgagaa	atattgtttt	aagagttagaa	47160
6870	tatgaaatgg	gaacacagat	taaaatagag	tatgtatata	tatacatata	tatgtgtata	47220
6872	tatatacata	tgtatgtgta	tatatataca	tatatatgtg	tgtgtgtata	tatatatatt	47280
6874	tataggccaa	tatatggagg	tagggtatat	cctagtgtta	agtgaagtaa	gaatggatta	47340
6876	ggtgatcgag	ccacatgaga	aggtgatatt	attagaaaaa	tgaaagtgtg	atttgagatg	47400
6878	atgaaaatga	tatatttgaa	ttgaaaagta	aactgtagta	aaataattca	aataaatgaa	47460
6880	tatttgggga	actacttaag	agaaaaatca	taaaacatga	ggagtcatc	tttcccagct	47520
6882	ccgccatgat	caggccttag	gatttaattg	gcaatgagaa	aatacctatg	aaaatgcttt	47580
6884	ttaaactatc	acatgaaaaa	gcaattttatt	atttttcatg	ccttcttaata	aactctcaat	47640
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6894	gccaaagcgc	gtggctcatg	ccggtaaatc	caacactttg	ggaggctgag	gcgggtggat	47940
6896	cacttgaggt	caggagtctg	agaccagcct	ggccaacatg	gcaaaacccc	gtctctacta	48000
6898	aaaatacaga	aattagcccc	gtgtagtggc	atacgtctgt	aatcccagct	atttgggagg	48060
6900	ctgaggcagg	agaatgcctt	gaacctggga	ggctgaggct	gctgcagtga	gcgccactgc	48120
6902	actccagcct	gggcgacaaa	gccaaacact	gtctcagaaa	aaaaaaaaaa	aaaaggaaaa	48180
6904	gagggagagg	ggaggggag	ggagagggaa	tctaagccaa	cactgtgaaa	tattgtgaaa	48240
6906	tatggagctt	ctacctaaaa	attcaaaaatt	ttaaattcct	tttaaaaaata	attggaatat	48300
6908	ctatggaata	tctagcaata	ctaagatgaa	attcctctgg	gttttcagtc	acctgtaatt	48360
6910	gacaccttta	gatgttgcca	tgggctctca	ggaagccaca	gcctccacca	atgcttttct	48420
6912	tcctgacact	gaagctaaat	ttgggtggct	agttttcatt	gtgctgttgc	tttctctatg	48480
6914	ggaaagaaat	accctttgct	atttatattg	ctgtcaaatg	ggaaatgaa	agacagccaa	48540

## RAW SEQUENCE LISTING

DATE: 09/27/2001

PATENT APPLICATION: US/09/914,549

TIME: 12:13:29

Input Set : A:\SEQUENCE LISTING.txt

Output Set: N:\CRF3\09272001\I914549.raw

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6920	aactatattt	aacctgtttt	gaatttgaat	tctaaattgt	at	gagagcaagt	48720
6922	gtcattttttg	attcattgtg	gattgtttta	catgttgcct	aacaaatagc	taataactaac	48780
6924	gtcataactt	tttaattagt	aaatttgaat	ggataaatgg	ccacttattg	gcttatagaa	48840
6926	taaataaaaa	cattttttatt	cagtcaagt	tttcatat	tttatcatct	ccaggacatt	48900
6928	gggcttgc	aaaaccattg	ttaaaaaaa	aatggcaaat	aatccagttc	catcatgata	48960
6930	tcattaatcc	cacacctaag	ctactgaaaa	aaatatatta	atattctggc	tcattgcttt	49020
6932	at	ctgggtattg	taaccacaga	gtacgaaaga	aggcaaaggt		49080
6934	taaagcaaat	aatagttttg	aaaaattggt	gtcatgctat	acggtatgta		49140
6936	tataatagat	atttaaatgat	tatgcttgct	actagtatat	gtaacaggac	tattatagat	49200
6938	taacaaaaat	gcggtgagta	tatttcttga	ttatttttta	aaagaataaaa	ttattattta	49260
6940	aaaatacatg	aattattttat	tgattcttga	atctttacca	gctttctata	attctaggaa	49320
6942	gcctagaagc	agaattgggc	aggataaact	ggcaaaaaat	gtaaaaagta	ggccgggcac	49380
6944	ggtgggctac	agtgagtcgt	gaatgcgcag	tgacactgag	tgatagatca	agatcctgtc	49440
6946	tcaaaaaaaa	aaaaaaaaa	aaaagaaaga	aagaaagaaa	aacaacaaca	aaaaaaaaag	49500
6948	caaagtacta	gggaaaacta	atagacatag	ttacatagtt	aattgtgcca	tatgttttaa	49560
6950	ggcaatgaaa	cttttatctt	aatattcctt	gcttactttt	tattcaaaaa	ccaaactgtg	49620
6952	tataaaacct	taaaattatt	aggatctaaa	aaataaaaatc	tttccttaaa	aatctaaaat	49680
6954	tgagatgtaa	attattcaag	agtgc	aaaacagttt	tcttataaaag	gctattagga	49740
6956	ttctaccact	tagccacttt	attattttagc	cactatatta	ctaagtttac	atatttttaa	49800
6958	aggtagtgaa	aatataggga	agacaaagct	cagggttaaaa	gagtttctgg	caataaaaat	49860
6960	atatcctgat	ggttagacta	ctttgcttta	tgttttctga	aagaaaagca	gtaaaaaaca	49920
6962	gttcaggtag	ttttgtgtca	attaatctag	aactatacca	aaagtagaca	tagaaaacga	49980
6964	gagattgttt	ttcagctttg	gatctgctta	tggcaataag	cagacttgta	ctattcaaca	50040
6966	acattatgca	ttcttcaact	tttcccagaa	taaggagct	tcccaaatgc	aatggtgcac	50100
6968	ataactcatt	ttctggcatt	ttgcagccca	gcatgaagaa	gaaaaaacaga	gctaggagtt	50160
6970	ttctggaagt	caagtcaaaa	acaccctgca	aattcctatg	gcagtcctcc	tttccataag	50220
6972	ctgcatagcc	aaaaatgttt	gccagacact	tttatcactg	ggtgtttcag	tgttttcatt	50280
6974	gtttaagcgt	tttgctgact	tgtgataatt	aaaattatta	ataatcatta	aagaaagaaa	50340
6976	aagtagaagt	aaataatggt	aattatctgt	ggttatcagt	agaggctctgt	atgttacc	50400
6978	agctttat	gacattgttt	gtgatcagta	aatcacagaa	taaaattctg	acatctaaac	50460
6980	cttggtctaga	ggtctctata	at	gtctgtttcc	tacaatctgt	atgaaagata	50520
6982	cttcaatatt	ttaagtttac	atgcacccat	cttttttaga	gtataatttt	ataactattt	50580
6984	ggtttatggt	gcttatgatt	tacatcttag	agtc	ttctgtcttt	tgcttaaagg	50640
6986	aatattatgg	atcaaatgac	ctatatttta	agaatacctt	atgggtttata	tattaagaaa	50700
6988	catttatata	aaattctaaa	gtaacttgct	tgtactattt	caattgaata	acttaatgta	50760
6990	tttcattcta	ttcttctcat	agtagataat	aaaaagtaca	tcatgattat	tgtattcatt	50820
6992	tatacttg	gaattaattg	aaaatagttt	ttatagttaa	agtc	tttattgttt	50880
6994	tacaggctga	agaaaaggct	cattcagagg	taaaaaaaa	tatgcaatat	tttaatat	50940
6996	tctattttag	tttgcatcca	tgatgaaatt	agtc	ccactagagg	gctctgtgat	51000
6998	acaatagcag	aactccacag	gactgctgaa	gtaaggcagc	taattgataa	atggtc	51060
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7002	ctagattgag	tcttagctca	acacctaata	agttttctat	aatagtaagc	actcattaag	51180
7004	tcattgataa	atgaaggtct	atggtcttcc	tattttatta	cagtcttttt	cccactccct	51240
7006	gtaagaccat	ctacacagga	taatggttga	aaactgggca	ccaagcctcc	acaacacagg	51300
7008	atactagcat	ctcagactat	ctgtttt	tcattatctt	gttgctctta	actgccattt	51360
7010	tatgtgtggt	gtgtcaccta	ttgttcta	cacatat	acaaatacat	at	51420
7012	actcgtgagc	aatcaaaact	gcattcagga	aagaatacta	ttttaatttc	ccttggtaaa	51480

RAW SEQUENCE LISTING

DATE: 09/27/2001

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Input Set : A:\SEQUENCE LISTING.txt

Output Set: N:\CRF3\09272001\I914549.raw

7014	acatttgtcc	tgggtcaaaga	gagcaggagg	actttaatta	tgacttttatt	caagggtgagg	51540
7016	taatggctgt	ttgattgggt	tacactgagg	caatcagaca	acagagaaaa	aaaatgcctt	51600
7018	aacaacagct	tttgcaaaaag	tattcctttc	ctttgaagtc	ttatttttatt	agccttttaa	51660
7020	aataaaaattt	gtgctatgtt	taaaaatatt	tgaaaattat	tgattaaacc	aatttgcctt	51720
7022	tataatctct	gaaccaaaga	gtggatatga	tttttaaaaa	tcaaagtgg	tttatttaca	51780
7024	tcacatggac	atgacaaaagc	ttctaact	gatcatagta	tagctactga	agcatcgaaa	51840
7026	tgtacatct	atttgcctta	gtagtagtta	ttcaactccc	cttttatcat	tgatgctgta	51900
7028	tcatgagtta	tggtttaaaa	aaacaatttc	aatcacttta	cagtttctcg	gattatattt	51960
7030	taaagatact	ggaatcatgt	aatagagact	atttaatttg	agaaatgctc	tttgagtttg	52020
7032	gattcattta	tgaataaaa	agacgctgta	ttttctgaaa	tcattcatag	tcattatctt	52080
7034	ataaatgtaa	agcaaatgtt	atttttagact	ggggtgtatc	tgttccggaa	aaaaaaaaaa	52140
7036	acaggaacga	agtagaatca	catttgggtga	aattatataa	gtgtctactg	tttccagctt	52200
7038	agagttctct	actttgttag	agtgtttgag	ttgaccacca	tttattttca	acaaaatcta	52260
7040	atgcccgggg	caaaaactag	acagttaata	aactatgtca	agaattctct	ttcaaactga	52320
7042	gacagcattc	caaaagtcca	actacaacta	tagataagat	ttgtttttga	agaaatgaga	52380
7044	agcatcaaaa	gtagaatgtt	taacatccaa	gtaactgaaa	tcccttgaga	ctagatatat	52440
7046	acttatagaa	cctagtgtca	gattgtttata	aatgttctat	ccttattagt	cacaacatga	52500
7048	gacttgcaga	acaaactgca	gaaagtgcct	gaattaaaac	tttaaactatg	atataatata	52560
7050	tccttaccct	tttctgtttc	agttttattg	gagtgtgaac	ttaactaaaa	agaaagatac	52620
7052	cttagaatat	acattatatt	ggtttatcta	attagttgca	cctatcattg	gttttttccc	52680
7054	ctgattttta	agatgtggat	aagctataaa	gcactctctga	gctaataata	actcactaaa	52740
7056	taaaggtctt	gataatacag	atttgggaag	gcttctctgc	agtcattgaa	actccagcca	52800
7058	ataacaattt	aaatgtgaac	tgattaaatg	ttgaattaa	cccaagtttt	agtgtattgca	52860
7060	ggatattcca	tagcctttga	gaagttttca	aactatgaga	aattaaaatg	tacagaggaa	52920
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7064	aaaaatatgt	gtgtatatac	agtttttata	aagaaaatat	ttttctacag	ttttattacc	53040
7066	acagtttttc	tagaaggaga	agaatcaata	cagagggtaa	actgctcttg	agtcatttgc	53100
7068	catttgaggg	atggcaaagt	gagcaagtga	gcgtactttg	atttgtagat	tagagtttga	53160
7070	cacataacac	tttgcttttg	aatgacattt	gcttgttact	gtggagtcag	tgttcatatc	53220
7072	ctttattttc	aggagtgtct	gctgatacaa	tgggggttaga	atgagctaaa	tacagcattt	53280
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7078	agttgctacc	ctcacatctc	agctttcagc	aaatgtaagt	cacttcattt	ttaaaatata	53460
7080	ttacaacaaa	tttttataga	ggaaaatgaa	atcatttttag	taacaaaactt	acaaaattttc	53520
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7084	gcctactcag	taataaaaatg	taaatccaaa	ctgatgagag	gcagcaatat	ggttaaaaatg	53640
7086	gcttgtttgt	tctaataaga	ttggaaacaa	tagtaacagc	catatgggtt	acttcttttc	53700
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7090	ttagtgtttg	acttttgaag	ataaaaatatt	cctgtgcccc	gcctccttca	tctcaatgta	53820
7092	ttgaacaatt	tgtaagcat	ccagttaatt	ctaaaaatag	aaattaggtc	taaataggga	53880
7094	tagcttagct	gcactgtgga	tgagatatgg	tttgctcaaa	aaaccttggc	agccttctca	53940
7096	tagcaattta	aaagggtaca	cttttactgg	caccagagca	gcccaggatg	gcagaaatga	54000
7098	tgacaatgaa	gaccgtcaat	taaattaaca	tttactgaat	atcttccact	gtgtcagggg	54060
7100	gcactcagag	tagatgcaga	atgataaagg	agaaatgtgg	cactgttccc	agtcctgagg	54120
7102	agcaatgggtg	ttaagaacag	cagtgaaggg	taaggaaatg	cctgctattt	tgccatatgt	54180
7104	cttacctctc	tactcaaca	gtcctttgct	cagtctctgt	gcatagcttt	gggcctgctc	54240
7106	tgtgcctccc	cacctctccc	actgctctc	tactgagttt	ttctatctcc	tagacaaagc	54300
7108	atgatatgtc	aagagtgagc	aggtgcagac	ccacagtgtg	agacttgaat	aagagccatt	54360
7110	tttaaatattt	ttttaagcta	tcattgtgca	atataaatcc	taagtatgtg	tatcatttca	54420

RAW SEQUENCE LISTING

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Input Set : A:\SEQUENCE LISTING.txt

Output Set: N:\CRF3\09272001\I914549.raw

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7112 ttcacaatgt attcatttta gcactgtatt tgaattgatt ttatttttctg aaattttggga 54480
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7116 ataatagcag ttttttagata attgtttaag caatatgaga aaataagggt attatttaac 54600
7118 ctgtgtgtgt ttttaagag atagtccaga ggcaaccgta aattttataa tataggctac 54660
7120 atgtatagaa gtatgaaata ttgtttgtcta ggttcctgaa tttgtaccca gaggaagtag 54720
7122 aataatgtaa atgtcagaac ctcttgggtt gtgtttatct gcaataagaa aggcctcaatg 54780
7124 gcaaacctta tttatttagat tgtcaggata ctgtcagatg tcttgaatga ttactcaggg 54840
7126 tttcatttta tttttaatgt cccttgggtt agctcatcat ataattcaga tattggaata 54900
7128 ataaatggct gctagacata gtggaagatg ggctgatact ttccatttga aatgtaatga 54960
7130 tgcttattgt cttcaaaaga aaaaactaaa atgggtatttc acattttttt gtttttgttt 55020
7132 ttgttttttt ttctctgaga atctcattct tactcatgat tattggtttc ttgtgtacca 55080
7134 tttcaacatt tttctattat atgctaattgt gtatatatac ttaatacaca cgtgcaaaaag 55140
7136 ctccacacaca cacacacaca cacacacaca cacacacaca cacacataca 55200
7138 gaaccaaatt ctaacatagg ggaataatct tcggagtga ctcgtgtgctg ctgtttgaaa 55260
7140 atggagatat aatttttagaa aggttccctgc agttggctac ccacctcgtc tgcctctaatt 55320
7142 atgcttgtca cactattttt actgatgtgt tttcatgact ttagggcatg aattctcagc 55380
7144 tgggtgttaa tatgaccaac aaagggtgaa aacaggttct tgcatttttt taagtactct 55440
7146 ttttatgtga aaagcacaga tatgcagata atacataact gaacatccag catatctgtg 55500
7148 gctttaaaat atcacgaaga agagcacaat tagggaaaag aaaacatcta tagtgtttcc 55560
7150 ctaggggaac aatcatttta aaaaaataaa aaataaggaa cacagactag aagcagcagt 55620
7152 gccaaataga taattcatgc tagtctttgt gttaatttaa aaagtgtctg tcttgagac 55680
7154 aaacgcccaa attgctctag gttccactca gctgtatgtg ttatcattag tattaacttt 55740
7156 tgcacgctga tgggagactg atatatatcc tgttttatgt tcttttaaac aatttataat 55800
7158 gtaattttaga aaccttctca aatcacatta gatccacaca aaaacctgta catagcagct 55860
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7174 tataatataa ttttataaga tatataatca ttgggggaaa ctggatgaag gatacaaggg 56340
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7190 ctacttttaa aaaaaagttt attaaaattc tcttttagac taatgcagta tctgggaatt 56820
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7194 aacattttta taatattgtt ataactatgg gggtaaaatt ttgtatata ctgaacattt 56940
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7202 tcagttgtaa gaagtgtgtg gtttaaat tttcagaaat gtttcatttc atctgaatta 57180
7204 atatctgtta atgtatgtaa tatacacata tttttaacat gcatgtactt aaattgatta 57240
7206 tagggacttg gtaaaattac ttatttatag gatattttta atataatcaa ggatttttta 57300
7208 aatctacagt tcccatttga aagtaaaagt aagtctttgt ttactagttt gttcacagta 57360

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RAW SEQUENCE LISTING  
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TIME: 12:13:29

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Output Set : N:\CRF3\09272001\I914549.raw

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7214	aaataatctg	ttggttttta	caacattttt	aagtatcaga	tattcatctt	tactcagtat	57540
7216	gtgacatgta	ctctcatagc	ttacgtgctt	ttcctttatt	tggggtggtt	tttatatatt	57600
7218	aattgggtata	tcgcatattt	aaacttgga	taattacatt	tatatggact	ctaaacaata	57660
7220	acttgatatt	taatttttaa	atttgaaatg	catctatgtc	tctgttaaaa	tgcatcttct	57720
7222	tccctttgcc	caaagtgggt	atggtaagtc	aagagagctt	ctagttagct	cacctctcat	57780
7224	ttgactggca	gagtaaagcc	cttggttcagt	agaatgtgtg	ttaagccttc	cctccctttt	57840
7226	gtaaagtgtg	tctgaacaga	gctgcataaa	accacaggta	aagtgttaag	ctgattctac	57900
7228	tagcatgtcc	ttagaaagga	gagcgggtat	attggcaggt	cctattgcct	ggcgtttctg	57960
7230	atcaataact	caccaacaaa	cagaaaacag	aagccgcaca	aggaaaggca	gaactaaata	58020
7232	aattggtaata	gcaaacaata	agccagatag	cctctggcct	ctcgccca	ccttaaggca	58080
7234	gctgggtcag	gtgggatgct	tttgtttgct	ttttaacgta	ttttctttac	aaatctcagc	58140
7236	cattacataa	tttggaatg	gacacaaggc	tagttattac	taacattttt	aaagacatta	58200
7238	ctgaatgaat	gtgtaagaaa	acaaaaggct	ctttttgcct	ttcagcagat	aagtctttta	58260
7240	acaaaaaatc	tcttggttat	tttgagattg	tggttctact	ctttgcttat	ttaatatttt	58320
7242	cataaaattt	gctagttaact	cttgcttttt	tgcatctctt	ctaagagaaa	acaattgggtg	58380
7244	catattatta	atgagaaaca	cttcagtgtt	tggaacaattt	tttgtagtgg	aaaagaaatg	58440
7246	tgaactttta	tggtgcagaa	tcattcttgg	ttcaactaac	tactaatttt	aaaacataaa	58500
7248	gtcttaataa	tatataaagt	ttatatgggt	aaatatatat	tacatataat	atatgtttta	58560
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7258	ctactatata	ttactatata	atatatagta	tatatatagt	atatattata	tagtaatata	58860
7260	ttactatata	atatataaat	atatgtgtgt	atatatatac	atgcctagag	tggttttaat	58920
7262	ttgtcagtgg	gctgtctctg	taatctatat	gaagaaataa	aatgtagacg	ttatgtataa	58980
7264	tgatatttca	tcttggtgtg	tggtcatcata	gtaattctct	ttacatatct	attcagatta	59040
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7270	acacaagtca	ggggatattt	atcatcatat	taatacaatt	ttactctgac	cttaaaatta	59220
7272	tgcaactgct	aaaggaaaaa	tcagaaccaa	ataaactgtc	attaacaacc	ccccgaaaa	59280
7274	tccatatttt	ttaaaagtca	ttttatcaag	tctctcagac	aagatgtgat	acctataag	59340
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7286	gatattaage	ccaccatcca	ttagctattc	ttcctgatto	tctccctccc	ctaactccca	59700
7288	ctgacaggcc	ctagtgtgtg	ttgttcccc	ccatgtgccc	acgtgttctc	atcgttctac	59760
7290	tcccacttat	aagtggagaag	aagtgggtgtt	tggttttctc	ttcctgtgtt	agtttgctga	59820
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7302	gttgaactaa	tttactctcc	caccaacagt	gtaaaagcat	tcttttttct	ctgaaacctc	60180
7304	tgcagcacct	gttattttctt	gactttaata	atcaccattc	tgactgctgt	gagatgggtat	60240
7306	ctcattgtgg	ttttgatgtt	accctttttt	ttatatgttt	gttggctgca	tgactgtctt	60300

RAW SEQUENCE LISTING  
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Input Set : A:\SEQUENCE LISTING.txt  
 Output Set: N:\CRF3\09272001\I914549.raw

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7312	gtcaaatgga	tagattccac	aaatgttctc	ccattctgca	gattgtctgt	tcactctgat	60480
7314	gatagtttct	tttgctatgc	tgaagggtctt	taattagatc	ctatttgc	acttttgctt	60540
7316	ttgttgcaat	tgcttttgga	gtttttgtca	taaaatcttt	gcccttacct	atgtcttgaa	60600
7318	taatattgcc	cagattttgt	tctagggttt	ttatagtttt	tggattttac	ttgtaagtct	60660
7320	ttaatccatc	ttgggttaat	ttttgtataa	gggtataagga	agtgggtccag	ttttaatttt	60720
7322	ctgtatatgg	ctagtcagtt	ctaccagcac	catttattaa	ttgttttttc	agtttcccca	60780
7324	ttgcttggtt	ttgtcaggtt	tgctgaagat	cagatgggtt	taggtgtttt	tcactaacat	60840
7326	aatcataaca	tacatttcat	tgaaaacaac	acgactcaaa	atgttcttta	gtaaccagtt	60900
7328	ataagttttt	ttgtgcataa	ttacaaactg	ccattcta	cataaacatt	ttgtggttac	60960
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7334	aattttcttc	aagtttcaca	tttaaggatt	catagtagaa	tgattaaacc	ttacatttct	61140
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7342	gaagtgacca	tcatgggcat	atatatatat	tttaaatcca	catatatgaa	tactatacag	61380
7344	taaaaactaa	cttatgctac	ataccacatg	gatgaatctc	aaaacccatg	taaagcaaaa	61440
7346	gaaaaccaca	aaagaatcat	gccatttgat	tacacttggg	tggtttttta	aacaggcata	61500
7348	tctaaacata	gtgctttaaa	gtgtaagctt	gggtaggaaa	aactataaag	aaaagcaaga	61560
7350	aaataattac	cacagaagtt	atgtagaggt	tatctttggg	gaaggagag	ggaataataa	61620
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7356	atatatgtgt	ggatttttcc	acagttgaaa	aggtaaaagt	caggtgtggt	ggctcacacc	61800
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7368	aaaatatagg	aaaaaatgag	catagcctta	tgctaatttt	tcagttacta	ggtctgatat	62160
7370	catcacattc	cttgcttgtc	attgaaaatt	ttttaaacta	tgatactttt	ttttagtgg	62220
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7380	aggatgaatt	cagagctagg	aacatgcacc	tttgtatcat	aatgctaagt	gaaggaaacat	62520
7382	gtacattcta	actgttacca	ataatggaat	atatttccgt	tattaagtaa	taagctttta	62580
7384	ttctttgtat	ttttgtgatc	catttgatag	taggtgcctc	agcatttcca	ctctgctata	62640
7386	agtacatgga	gatataattt	atttaagtca	tcttattcat	gtctttcaaa	aagaaattca	62700
7388	tttttggcca	aggattttcca	aattttgccc	catatatagg	tatagtttat	tatagacttc	62760
7390	gtttgcaaaa	tattaaatcc	ttatatcctt	ttagggacac	aataaaattt	tataagtttg	62820
7392	agataatgta	cttgacgttc	tacctcaggc	cgtgggtgaga	gattgaagtg	cctcttcatt	62880
7394	ttaacatttt	gggttcaagt	tgttgcataa	gggcatgcaa	atggaaactg	gcctattttt	62940
7396	gagctttaat	aaaatcgta	aatacttctt	aatcttaaga	gttatagtta	tgtactacaa	63000
7398	tatgtataat	tctctaata	ttaaaacaaa	acctgaaagc	cacaaaagct	tactgtgaaa	63060
7400	taaaatgtga	tggaatatta	tttctaactg	gcttacctgt	atttccttca	ttgaagggaa	63120
7402	tatgaagtag	aaaagccctt	ttattgaaaa	gagtttgga	agtaaagata	actcttttca	63180
7404	attcaattct	ttgtaagtag	aaaaagagta	aagataatgt	ttagctgtca	gcagatgtct	63240



RAW SEQUENCE LISTING

DATE: 09/27/2001

PATENT APPLICATION: US/09/914,549

TIME: 12:13:29

Input Set : A:\SEQUENCE LISTING.txt

Output Set: N:\CRF3\09272001\I914549.raw

7406	gacacttgat	ggagcgtatc	attacaatag	agcagctaac	aatatctgca	aaggatcatca	63300
7408	tgaaagtata	aaaatgagga	atatttgtcc	attgaccatt	tcagtgcact	ctttttgggc	63360
7410	tttaagtcta	aaaatcttgg	cagatcagaa	ctttatatcc	ggcattttga	gtgtcaaatac	63420
7412	tctacatgat	gtgcaagtca	gaaggagtta	ttacttgcaa	aataccatct	tctttcagaa	63480
7414	gttaaaactca	cattaaatgc	caggagactg	aaacactgat	tttaagaaga	caaagtttag	63540
7416	aaaagatgaa	tgaaaatgtg	tgtaaagaa	gagtcaccag	tcagagctaa	ctatgatagt	63600
7418	catagtattt	aaagagttgg	aacacatgaa	attaagcatt	ttgtaaaatg	aaggcttttc	63660
7420	atccatccac	ataagattct	gacatttaaa	ctatgtttct	tcattctgt	tcacaggctc	63720
7422	accttgtagc	agcttttgaa	aagagcttag	ggaatatgac	tggccgattg	caaagtctaa	63780
7424	ctatgacgc	ggaacaaaag	gtatgttcag	aaattgccac	tggagactga	aagaagacag	63840
7426	caaattgcat	aggattctta	aataatacct	gaagctcctt	aaaaataata	ttccaggctg	63900
7428	agtgcagagg	ctcatgcctg	taatctcacc	actttgggag	accaagggtg	gtggatcact	63960
7430	taaggtcagg	agttcgagac	cagcctggcc	aacgtggtaa	aatcccatct	ctactaaaaa	64020
7432	cacacacaaa	aaattagctg	ggcatggtgg	cgggtacctg	taatcccagc	tacgcaggag	64080
7434	gctgaggcag	gagaatcact	tgaacccagg	aggcagagga	cgcagtgagc	caagatcaca	64140
7436	ccactgcact	ccagcctggg	agacagaaca	aaaaaaagag	taataataat	aaaataatat	64200
7438	tcaattctat	actaaattaa	aacaatgata	atacctttct	tttcagattt	taatttaaag	64260
7440	attttatcag	tttactccat	attggaacac	acaaaggcaa	acaaaatcct	tgctgggcag	64320
7442	tctattaatt	tacttctgga	tggaactagt	aaaagaatac	tgaatgttaa	gaaagagaaa	64380
7444	cagtcacata	agagaatatt	ctgggggcaa	actgttatgc	agttgacaag	aatcacactt	64440
7446	tgataagaac	tttcacaaat	acatggtcac	taaatccagc	tatagggcac	ggctgtaggc	64500
7448	taagacacac	aggaaggatg	cctgggactc	tgccaagtaa	gggacttcag	gttacagcag	64560
7450	ctatgaaaca	aaggccaatc	ctgtgtaatt	ttgaaataac	aagaactagt	tgccatctag	64620
7452	ggatatcacc	tttgagaaa	agtcatttgt	tatatcaaaa	tacttaaaat	gaacctaaag	64680
7454	gtttttatgg	tatgaaagaa	ggtataccaa	aaagaaagga	acggagaatt	tagttcacga	64740
7456	agacaaatgt	attaaaaagg	tccatactgc	atagaaagcc	tggtcacctt	tcctgtgatg	64800
7458	accagttagc	ttacttctct	gctgttagtc	cagtggcctt	aaacttcctg	gataggatc	64860
7460	agagataggt	gaaacctata	gaattctatg	gagtgtgtgt	gtgtgtgtgt	gtgcgtgcgt	64920
7462	gtgtgtgtgt	gtgtgtgtat	gaaaactgta	aatgtgcata	aatgatcagg	tgtccagagc	64980
7464	tttcatctaa	ttctcaaaga	gaccatttat	atcagaagtt	ttgggtattt	tcaagaatgc	65040
7466	gttctcttat	ctatccatag	gaatggcttc	agttttgtct	ttagattctg	taagttatgt	65100
7468	gattagcttt	acaaaagtag	tatgtattac	caaattttgt	cactttacaa	aagtttattt	65160
7470	ttaaaacaga	atgaatagtt	caatgaaatc	aaaagagtaa	atcgaatatt	cttataattg	65220
7472	ccaagtatta	ttagcacatt	gtattctctc	tcatattctc	cgtataaccct	gcccgtgaga	65280
7474	gagaatatta	tccattcctg	gaaaatctgt	tctagcacag	ctaacaaact	ccttttgaaa	65340
7476	cataaatttt	cctttctttc	ctccctccct	ccctccttcc	ctcccttcc	tcctttttcc	65400
7478	ttttctttcc	ttccttctct	cctcttttct	atccttccct	tctcctccct	tacacccttt	65460
7480	cttctcttct	ttccccctct	gtctcctctc	ctttcttttt	tgctgcagct	tgctcacttca	65520
7482	ctatgtaata	taagaaccca	gcaaatagaa	ttagaaggct	ttttagagca	gctgacggga	65580
7484	aagaataaaa	acactggccc	ccagttattct	tgaatgagaa	ttctggctat	gtctgtttaa	65640
7486	agctgggtaa	tcttgagcaa	gtttatctaa	cctttcttga	acctcaaatt	caccttctta	65700
7488	aaagtgggga	tgataatgac	taccttgtag	gatcaccatg	aggagttaa	cagatactgt	65760
7490	tatcatgtca	catgctaggg	gctacccaaa	aatattacct	tcctttacat	ttctcttttt	65820
7492	cccttgaaaa	ttataagata	acaccaaatt	cctcactggg	catataccaa	gcatattgtt	65880
7494	ggaaatgagt	gttagaattt	aagtctcaat	atctttaata	agtcaaaatt	aatagaattt	65940
7496	ttgtctctca	cccaatattt	tcttgaactc	tgttatatct	gtaagtgaat	tttctcatag	66000
7498	aaacatacag	agaattttct	catatacata	tagaaaaaaa	tgtagaggta	tgtaaatgta	66060
7500	taatgcctat	gattaatgcc	tgaatattta	aaaataattt	ctataacata	agagatttta	66120
7502	taatgtgtct	acataatcct	taaaataaca	ttgccaaaat	tataaaattt	tctcagaaga	66180

RAW SEQUENCE LISTING  
 PATENT APPLICATION: US/09/914,549

DATE: 09/27/2001  
 TIME: 12:13:29

Input Set : A:\SEQUENCE LISTING.txt  
 Output Set: N:\CRF3\09272001\I914549.raw

7504	tatcagaatg	tctcatattg	tccttatcac	ttttttaact	gaaaataaaa	tcacttcttt	66240
7506	ttgaattgca	aactgtatac	acacaacaat	catggttaac	tagtttatta	atttgagatt	66300
7508	ataacttgcc	tattctcaaa	gtgatattta	aaagcctata	aaattatttg	caatgtgaaa	66360
7510	tggataaatt	caaagacaga	atctaattaa	aaccagtaga	ataatgtata	taacaatata	66420
7512	cctcagccta	gataattact	actgcaaggc	actgaaatga	attgaatttc	aaggaagcta	66480
7514	tggatacaaag	ggagattggt	aggtgtgttt	tattctcatt	ttctgaccag	gagagcataa	66540
7516	tttagactga	ggagaaaact	ctttggcact	aaattcaagg	acgaatttat	tgccaagggt	66600
7518	tttaaattgg	ggcatgggaa	taacaaaaga	caaaatcact	gttcaaatag	acatttctct	66660
7520	aaaagctaag	ggcataacat	ttaatcatat	ttcactaaag	gcatttcttc	agggagctga	66720
7522	gataaaaggg	tatattgctc	tctggtgatt	caacaatcct	gagaaaaggc	ttgtgaagta	66780
7524	tagagcagag	attcttaaac	tcccttcccc	aagttataag	tttcatttgt	ctatatagtc	66840
7526	attcatcaag	tttatattga	atttgtgctc	ttctaataag	aaaacagtac	agacaatata	66900
7528	gatatagaat	gatagatata	ggctatatat	tatagacata	cctatctact	agaactctaa	66960
7530	aagcatatta	tacatgtatg	taatatctct	catggagttt	atatttctca	tatatatctc	67020
7532	atatatatgt	atctctttat	catggagttt	atattttagg	aggtcacaga	tgataataaa	67080
7534	aatataatta	aaacaggcca	ggtgtggtga	ctcacacgtg	taatcctagc	actttgaaag	67140
7536	gccaaggcag	gtggactccc	tgagatcagg	agttcaagac	cagcctggcc	aacatagtga	67200
7538	aaccccatct	ctactagaaa	caaaaattag	ccaggcctgg	tggtgggcac	ctgtagtccc	67260
7540	agctattcag	gaggttgagg	caggagaatc	acttgaacct	gggaggtgga	ggttgcagta	67320
7542	agccgaggtc	atgccactgc	actccagcct	gggcaacaga	gcaagactct	gtctcaaaaa	67380
7544	aaaatatata	tatatataat	atataatata	tatataaata	tatatattat	ataatatata	67440
7546	tataaattac	atatttataa	atatgttaatt	tatatatata	atatataatt	aaaacatata	67500
7548	ggatttcagg	tgatgataag	cactactgaa	aaaagtaaaag	ctgagaatga	ggatactgag	67560
7550	aagctggttt	ggaagctaaa	acacaaagta	acaaaaggcca	aggtggttac	atgttcttga	67620
7552	ttacatactt	taaaaatgga	taaaactaat	taagactcag	attctagtct	ttgggcttca	67680
7554	cagtgtgatt	ttcagcaatc	acatggcatt	aatagcctga	aactacatca	aaattgtcat	67740
7556	ttgatttata	gaccaaaata	actcccttga	atagagaggg	attcactcct	aacacttttc	67800
7558	ctatttccag	atgccaataa	acacggaatc	tcttgccaaa	tttgtgtggc	agaacactgg	67860
7560	ttttatatac	ttatagcctg	gtaagaaaga	aaagacatgt	atgaataact	tagaaggcag	67920
7562	aaaattatca	tgctattaga	ctcagtacaa	tgctatgtgc	attctcaaaag	gaaacatctg	67980
7564	cagaggcagg	agaattgctt	gaaccttgga	ggtgaagggt	gcactgagct	gagatcatgc	68040
7566	cactgcactc	cagcctgggt	gacagagaga	gactgcatct	caaaaaaata	aaaattacaa	68100
7568	aaataaaaaa	taaaaaatag	tgatcaatct	ggcagcattt	tctgaaaagt	aagcagtatt	68160
7570	cccaatagct	gctaaaagaa	gacatgttat	ataatactaa	gtctgttaagt	aggtaaaaaat	68220
7572	taagagaatt	gttaatgtgc	ttgtctggga	gtgaaattat	ctctaggcat	taccctatac	68280
7574	ctaacctagg	actcagtaga	ctatgatatt	ggcgtagttt	gaccaagaat	tttatcctga	68340
7576	tttcagatcg	ttttctcttc	accagcactt	cttcaccagg	atttatatgaa	aaaaattaaa	68400
7578	cctgatgccc	tgaggcatcc	atttatgtg	ctgaaataac	ttcttttctc	accatctaga	68460
7580	atgggtactag	ctatgtacca	ctcttgtcag	aatcaaggaa	attgtactct	aaatcattgt	68520
7582	gcagcttaat	tttctcacag	aaggccagtt	gagaaaggct	caacttctag	gaatccagca	68580
7584	aactataatt	tttataagta	acattttttac	agaactactt	ctaaatcctt	gtgttcaaat	68640
7586	ttactaaagc	tatatccaca	gctaaatatt	tcagaattta	aaatttaaaa	gactttcaaa	68700
7588	ttagtccct	gtagctgtca	tgccaaggca	attagaacat	atgttaagggt	atgaggggtt	68760
7590	tttcttggtta	gaaggctcaga	gcagggcaga	gaagtagccc	cttgatagag	tgatgaagct	68820
7592	cagatattga	ctcctatgct	aaccataaag	cctagtagtt	tgctcatttg	ttacctctct	68880
7594	gaaacatttt	tttgggtgac	tacaaaacag	gaattgaaac	cttcaaaaata	agggaaatttg	68940
7596	aaaccaaadc	tttgaaaata	gataatgctg	caactaaaaa	tttagttgaa	taagattttt	69000
7598	acattaactc	tccctaattt	acgttatgat	atttgccatc	tagaagtggt	tttaaaaaat	69060
7600	atattgctgg	agtcagatga	tgcatccatt	aatctttggg	gcatagaata	atgtgaatct	69120

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/914,549

DATE: 09/27/2001

TIME: 12:13:29

Input Set : A:\SEQUENCE LISTING.txt

Output Set: N:\CRF3\09272001\I914549.raw

7602	aaaat	ttttca	aattatt	tac	actact	ggta	tttgg	tcaat	gtaatt	tatt	tgaa	actaga	69180
7604	tgcaat	aggg	atggc	caggt	tatttc	cagta	gaaca	actag	caagac	ttca	gatgc	atgg	69240
7606	ggagt	gggg	aaggag	gacc	tgttta	agga	aactag	agct	ggga	agtgtg	agatta	actt	69300
7608	agtgcca	atg	tgagg	acct	aaaag	cagat	gtgg	tgaaa	attta	aacag	gcttgc	ctag	69360
7610	aaggt	caagt	tagtt	gatga	cacttg	atga	gattg	tccca	agctt	tg	ttct	caacaa	69420
7612	agtct	ttgtt	agtga	gaat	ttgga	agag	atcag	gtata	gtta	agaa	ac	tg	69480
7614	agggc	accag	gaaag	gcga	tattct	gaca	caaa	atttga	tcatt	tttatt	tgga	agcatt	69540
7616	tcaag	cctga	cctga	acga	ttgtt	tagcc	tcag	atacat	gcata	aaaact	gtgaa	agag	69600
7618	acatt	gactc	aattt	tagctt	cttta	acatg	agaa	actttc	gtgga	aaaact	aga	actttac	69660
7620	aagct	cagct	ggtgt	tg	gc	atcattat	cttga	atagc	tcact	ggag	aaa	atgaaat	69720
7622	cttag	tttgg	ttctc	aggtt	ttaaa	atatac	tatc	attttt	gaaa	agtgtg	aagta	acaaa	69780
7624	atatg	atctg	attat	cttat	tccta	aaaatc	ctttg	cagaa	ttat	cccagc	ctca	atcttc	69840
7626	tcttt	tagtat	tta	atgagaa	taaga	aaactg	gaa	atgactg	aattg	gaaga	gtag	acttta	69900
7628	aatcc	atatac	ttgat	ggcat	atacat	ttttt	cag	tttttt	tctaa	atgat	taatg	aggat	69960
7630	tctca	aaaact	tgat	tatctt	ctatg	tttcc	cttca	acata	aaga	aattgt	atgaa	aatat	70020
7632	ttta	aaaatt	tcta	atgatt	ttatag	ttag	ctat	cttggg	aattc	atttc	taatc	atgta	70080
7634	cctca	tccaa	actcc	ccact	atgg	acaaaa	ataa	ataaaa	aatt	tattag	tgcat	ctgaa	70140
7636	ggcc	acatta	caatt	ttctat	gcatt	ataga	aacct	gagaa	aatgt	atctt	aaaa	ataaaa	70200
7638	tgtga	acaac	taacc	ataat	tatga	agaag	aaaa	atgaaa	actag	aaata	aact	attgaa	70260
7640	aaatg	tctat	gtat	cagtta	ag	tttttatt	ttaaa	attct	ttatg	tttat	ctct	tataata	70320
7642	ctatt	gggaa	agag	agaaag	gaaa	acctga	ctttg	ttctc	atcc	aaagga	ggtg	attcca	70380
7644	ctgat	tttagc	caaaa	taaga	cttcc	tggtt	ataa	ataata	ataa	agtttt	tgatg	ttttt	70440
7646	tatat	ggttac	ccc	actcact	aggt	gatcag	acacc	ctcct	gca	aaaaaaa	aaaa	aatacg	70500
7648	tatg	caataa	ag	ttaaagtt	ttatg	ttatt	ctttc	aaagg	gaga	aacatc	gttt	taacac	70560
7650	agacc	agaat	attt	caacaa	agtc	atccca	atatt	ttatgg	agat	cataaa	tcaag	cgaaa	70620
7652	aaata	tatttc	atca	acaact	aaaca	aaacta	catta	aaatag	tctca	aaagca	cattt	ttcact	70680
7654	ttttt	tctga	cagg	aaaaa	agttt	cacaa	gtgtg	ggagac	atttt	accat	ggctt	tttaac	70740
7656	agtg	aggaag	gatg	tttaaa	taa	aggga	aa	tatatg	aaag	ctcaga	gaaa	agagat	70800
7658	gggtg	tggt	tgag	tacaa	ggtg	agagca	gatct	catta	actg	aaatga	gagag	aagga	70860
7660	agga	at	ttttg	caa	atatgga	aagata	acta	gtgca	agttt	gaac	agatta	tgtca	70920
7662	tgtag	aa	ttt	ggctat	cttt	ttaat	caaag	aagact	atgg	aatatt	tttat	aggtg	70980
7664	ttata	actcaa	ag	tttttaag	aaata	acagt	atga	atttgg	ttga	actaat	ttttt	tcata	71040
7666	gatag	gattc	tccc	aagtta	tatag	catat	atatt	ttctta	actag	ttatt	cttc	ctttta	71100
7668	catat	atttgt	gcc	acattga	gta	acaacta	acct	gcta	aat	agct	attggt	tttt	71160
7670	taatt	aatat	tag	aaagtg	tcatt	ttttct	gttt	catatt	aaac	atgata	ttct	gaaaaa	71220
7672	gcaac	attgc	ctga	atgttc	tac	attttat	ctttt	tgaaa	acag	gtttta	taag	agattt	71280
7674	cttgt	gaaaa	gctg	aacgtt	ctg	acactga	aata	agtcag	cta	actcaa	gcta	agctta	71340
7676	at	tttttgac	actg	ttggca	tgag	gtctca	ttccc	aattt	ttt	cattta	agcc	acaggc	71400
7678	aaatg	tttta	acag	atttta	atcc	gtagta	caag	cattat	tgat	cttaaa	ttta	aggata	71460
7680	aaa	acctgat	ttta	atttaga	attta	aatatg	catt	ctagta	ttt	acgttgt	ata	attaata	71520
7682	ttt	acattcc	atgat	ttccac	tatg	taccat	ttatt	ctttt	ttga	ataaat	ttcc	agtagg	71580
7684	agc	agaataa	atttt	cagtg	aat	atttttat	ttct	tg	gggg	atatt	tttta	atgg	71640
7686	tatta	agttt	cggt	aaaaatc	tgtt	gcta	at	tggc	agtg	acaga	atata	aaa	71700
7688	agact	gagtc	attat	gatga	attg	ggtctg	act	ttt	gtca	tgac	actgga	aatt	71760
7690	aaat	attata	ttct	ctttt	ata	ataaata	tagt	cgaaat	gaatt	gcagt	caag	tatttg	71820
7692	aag	accatc	tata	aat	ttta	ggcg	gtt	act	gtt	gattttt	catt	atgaga	71880
7694	ctcata	agct	act	aaa	agta	cata	aa	agaag	gtct	ggttgt	ttgt	tttaaa	71940
7696	ctct	atcagg	aaa	atgtcag	gtat	ccgatg	aaa	atagata	tatg	agggtgc	cagg	tatcta	72000
7698	ttccc	aaactt	ggat	atcact	tca	attagca	tc	atctttt	tttt	ttttta	agtgt	ctaag	72060

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/914,549

DATE: 09/27/2001

TIME: 12:13:29

Input Set : A:\SEQUENCE LISTING.txt

Output Set: N:\CRF3\09272001\I914549.raw

7700	gttagaatag	tcaccagata	ttcccatgta	tgaagcaatt	ttctgcaaag	gccgctgtgg	72120
7702	atgatctttt	taaaatatat	attctgggag	acattgagta	aagagaaatt	atttaccaga	72180
7704	gaatgaagaa	ccgaggcccg	attctttggc	tttctgcaa	agatgctgaa	ggcagtgtatg	72240
7706	aatgacaaat	acattacca	ggaattctcc	ctctaagagg	ctgacaaaga	tctgattttt	72300
7708	aggattatat	taccaccaag	aagatacccc	ttgtcactga	gcttctaata	gaaatatgggt	72360
7710	ctatactgaa	acaattctca	gttctttttc	tttctatctt	tttttgagtt	attttatctt	72420
7712	ccaaaaatga	gttattttctg	ataaaataat	tcacttaaat	aattatgaaa	gttcaaattt	72480
7714	gtgcaaata	ttttattggg	acatcttaaa	attactctaa	attcaaaaag	aaaatatatg	72540
7716	ctttattaaa	atttgatctg	taagctgctt	tgtttgtaat	ttactatta	tataaaaatt	72600
7718	gtataataca	tatattttat	ttactttatt	cctgtgttgc	tttggcttgg	tgagactagg	72660
7720	tctccacatt	aggagtttta	ctgaatgaaa	aagtatcaga	atgtaacatg	actttgatat	72720
7722	ggcatcgaga	tttaataaga	tgacatttaa	taggaattag	gggtaagtgc	cagggttttac	72780
7724	acttaaatac	aaataatcaa	ttttgcaggc	acaaaatact	tcaaacaaaa	tctgaaatca	72840
7726	ttcatttgac	aaaacttcag	gtttgcagtt	gacaataaat	acaatacaat	gcaacagtgc	72900
7728	aatagtata	tctaaatatc	taatgtaatc	ataggtaata	ttagtaagt	tggttatctga	72960
7730	aatgagtgg	gtgatatact	gctttacttt	gtactgggtga	gttctgggtg	ccacctttga	73020
7732	aaggaaataa	gactattcat	atctctttta	taagacaata	agaaaaacaa	acaaacaaac	73080
7734	aaacaaaaaa	ccacctcctt	tacttttagct	gagaaagaag	ttattaggta	cagcttgaca	73140
7736	agttcagcta	agcatccaaa	tcttccaggga	ggttgttact	acataaaatc	aaaccttttt	73200
7738	aattcaacta	tgagcaggga	gatttttattt	ttctttcggg	tactaaagct	tccaaactct	73260
7740	gtttattcca	caggaatctg	aacttataga	actaagagaa	accattgaaa	tgctgaaggc	73320
7742	tcagaattct	gctgcccagg	cggctattca	gggagcactg	aatgggtccag	accatcctcc	73380
7744	caaaggtata	tttagaaatc	atttcatttc	cacccaatat	aataggcatc	tattttattt	73440
7746	attaattaca	gtagaactgc	atttactcag	tgtoactgtg	cattattaat	acatactagt	73500
7748	tgtattaata	gttgatttaa	tacatactag	tagtattaat	acatactacg	ttgggtattaa	73560
7750	tgtatcaga	atcctagaat	tttagaacag	tgacttccat	tatcagataa	tttttaaact	73620
7752	gattcttaaga	aattttggttc	tatagtgtga	tacacatctc	tctacttgat	tcagtggaga	73680
7754	tggagatgga	gtggttggtt	aatacatgca	tatctgactt	caggcaaaac	aaacccatta	73740
7756	atgagtatga	taatctagat	ctgtatttaa	aaatgaaata	gtcaatatga	tgatatagta	73800
7758	agcagtgggc	attgggaaca	acttttctctg	gatggaggct	ataaaaagg	acatttctctg	73860
7760	tagataaatt	tgaacaata	aaaacaacgg	gtgaaaggta	gctctgtttt	aaattattcc	73920
7762	tatgcttaag	caattctaaa	caatgaaagg	ggtaattctg	ccactgcccc	tacctctggg	73980
7764	ttcaccactg	aagaaatgct	cattattaat	atcgtgtcat	ttttttcctt	tacattgggt	74040
7766	ctattttactc	atttcctgac	acttttcaat	ggccttcagt	gagctcagct	ctttccagc	74100
7768	ttaaaaaatc	ctgtcctaaa	acatgaatgc	cttattatct	ctcttttcat	ttccagaaga	74160
7770	attctgagaa	aaattttatg	aagtctttca	atgtcttcag	ccatcttttag	accactggag	74220
7772	tgtagctcct	tttccctcca	ctccaccaa	acaatgctct	ccaggatcag	cagaaactta	74280
7774	catgacacta	aattcagtaa	aacgtttata	attcttattg	tattagacag	acatggaaac	74340
7776	agcatttgat	gctgatattc	atttcttctc	atgtgaaaca	tccggttttt	ctaattgttcg	74400
7778	tgacatcata	cattcttggt	ttttcttctg	ttcctttgaa	atattttttc	aatattttct	74460
7780	ttgtaaaattc	actcttttgt	atccatttgt	taattgttga	tatcctaagc	tctcttccat	74520
7782	tatgattcta	tgatccttat	ttaaaatata	tagaaaatca	tctcatactc	tagctgtaat	74580
7784	ttttattaat	gtgctaata	ctaataactg	tcaaatctag	gtctccaggc	caggctctgt	74640
7786	atatccagct	accaagagag	aactccacgt	ggatatcttt	ggatgtctgt	tttgcatctt	74700
7788	aaacctaact	tctccaaatt	tgcaattgtc	ttctgtctca	gacctgctgc	tccttcagtg	74760
7790	ctctttgcct	cagtagatag	caccaccatc	cttccattta	gccagaaatc	taagtattct	74820
7792	tcataactcc	tcctctctc	attgaataaa	ttaccaagat	ccgttgatcc	cattccttaa	74880
7794	atatctcttg	gatctgttaa	cttttctctg	attttactct	tgccatccat	cacctctctc	74940
7796	ctgaaccatg	accacaaacc	cctaaatagc	cttcctcttc	ttaatcttat	cctgctttac	75000

RAW SEQUENCE LISTING  
 PATENT APPLICATION: US/09/914,549

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Input Set : A:\SEQUENCE LISTING.txt  
 Output Set: N:\CRF3\09272001\I914549.raw

7798	accagtcttc	acgctgaagc	cagaatagtc	attaagaaac	acatctacag	gtatccatt	75060
7800	cattgccttt	agaatggaat	acagactcct	cagcatgaca	taatctctct	tcaccagctt	75120
7802	catttattca	acaaatattt	attcataacc	aattaagtgc	cagatgatgc	acatatagac	75180
7804	ttcttgttct	gttggttgc	tgcatattcc	atatttcagc	tatcctgaat	tgttttcaat	75240
7806	tattcataag	ttctttatga	attgtgttca	ttccatttgg	aatattctac	cttgtttgat	75300
7808	cagcataaag	acttttcgag	acactgcagc	agcagtgaac	ctaaatgtgt	ttccttgacc	75360
7810	cctacattga	atgacacccc	ctgtgatatg	tttctggaag	cagcaatact	tcccttctta	75420
7812	aaattacatt	atactttggg	gcttttattt	aaggatgtgc	tttcttgatt	tacaatagta	75480
7814	gagcttgttt	tttcaccctt	ttgaaagaca	tcaagatgcc	catgatgatg	tcttgcattg	75540
7816	aacaggggtt	tatttgaatt	tttaaaagaa	gaataaagta	atttttaaat	gaatttcaat	75600
7818	ttaaatttta	ggaaaacaat	tatataaagt	gagatatgct	taaattgaag	gacaaagtag	75660
7820	ttctgtaggg	gctacttctt	tcaagacttt	agcaactttc	catgtggggg	agtgatttat	75720
7822	gtgatgcag	gaaaattact	gcataattta	agcttatctt	agagctataa	taaagcagct	75780
7824	tatgttctaa	atcttcatgt	cgtaaatagg	tccagaaggg	atttaaaaag	ccttaatcct	75840
7826	tactttaaca	cagcacaagt	cactgaagtg	aaacttgctg	aaaggattcc	ttttatgtta	75900
7828	ggcaacaggt	agctgaatat	atctacagaa	attgaaaaat	tggaattctt	ttgctcagaa	75960
7830	atgtgggagg	ggtggagctt	aaggtaaaaa	ataacagtta	atatctaaat	tgatcaagaa	76020
7832	atatgaaaaa	ataatttgct	aggtttttaa	actaacaaaa	accatgggta	taaagggttg	76080
7834	aatatatata	ggatagttag	attgtatttc	tgtaatatata	aaactcagca	ttaaatttaa	76140
7836	tgaacacaaa	gtgattctta	tcacattgac	cattgacatt	acatggaaaa	aatagtcagt	76200
7838	tggaactaatt	atgtgtcttt	ccatgggtta	ttaaggtaat	tgtatggcat	ataaatttat	76260
7840	actggaaatc	acattgaaat	tcacttttag	aggcccttaa	aatattttctg	taatatatat	76320
7842	ttttaacata	tgatcttaaa	agatatattt	ggaatgacac	aacagtttta	tagacaggcc	76380
7844	tgactatcac	acaaccacac	accaatttgt	gaatgtgttt	ctatttcctc	taaattaatg	76440
7846	catcacattc	attaacaaag	tttgataaat	gactatagtc	tataataaaa	tatttttggt	76500
7848	tacaaacata	tttaaacacc	tgctattaag	tataggcatt	atcagatctt	aaaatacaaa	76560
7850	gattttaaaaa	attaccctgt	ggtcatggag	ctcacaaatcc	actgcaaaaa	taatgtttgt	76620
7852	gataagaaa	ttgaaagtgt	aaggtaaatg	aaaattttac	ctttattttt	caaaatgtac	76680
7854	cattgctttc	taagtcaacta	cttctgtgta	aatatggaat	tgtttttcct	taagatatac	76740
7856	caaatatagt	tggaatacgc	atgtattaaa	attctgtcag	cactaagttg	tttttttagac	76800
7858	atagtgatag	gcaaacatag	ttatattgaa	tgaaaaatta	gaatcaaatt	tattaaacac	76860
7860	tgtgtactga	ttgataccac	atgccatatg	cttgatagc	aatacaagg	ttggaattta	76920
7862	taatggtaaa	caaaatagat	acgggtctttg	tctccataga	acttttagtc	tagtgggaga	76980
7864	gcagaaggta	aaggaatgta	tgtgatcatt	ggtgaagctg	aacatgtata	cccaaacagt	77040
7866	tataagttcc	aagatggaca	ataatgggtg	ccatagggaa	ggagggtacc	aaggaaccta	77100
7868	ctggagggtta	catagggag	attattccaa	ggtagtaata	tttaagtga	tatccaagga	77160
7870	ataattgtca	atcactttat	aagtactgag	ggaggagtat	ttcaaaagag	ctttgaggcg	77220
7872	gaaaataaat	tagttccttt	atggaactaa	tgtaaggaaa	atactaagca	aacatgtaat	77280
7874	aagaagaaca	cggttgatga	gttaagaact	gacaagatta	ctgaaggatt	gtaggccata	77340
7876	tttagaagtt	ggatttttta	tctattctta	ttaaagttag	aagttattga	aaggtcttaa	77400
7878	gtgggggagt	gatgatgaag	tttgcccttt	aaaaaagatt	tttctagcta	ttgtttatag	77460
7880	aatggtttga	agatgaataa	gtccaatagc	tatacttgct	gtaaagggtta	tggtggtagc	77520
7882	ttgaactggg	gcagtgggtg	cacagaggat	gggagatgga	aaatgacgag	tgaacaaaca	77580
7884	catacctgaa	aaatttaagt	taaaaataga	cctctccatt	aattcagatt	gctgatattc	77640
7886	attcggttag	ccattcttta	ctgaacttta	tgatgcccc	tatactgaat	taaatactta	77700
7888	caagcactaa	aaaagaaatt	gttaggggaa	agtaaaatgc	atttccttca	tttcacaata	77760
7890	ttattaatat	tatggctttg	ctaattctta	ttggtgaatg	cagtcataat	tgaaggtaac	77820
7892	tgatacttcc	aaggactact	tttgacctag	gattactatc	tttttaaaaa	tttagtatta	77880
7894	aagaagtcaa	acacaattta	ttaattctgg	atataataaa	aattctgaaa	tactttaata	77940

RAW SEQUENCE LISTING  
 PATENT APPLICATION: US/09/914,549

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 TIME: 12:13:29

Input Set : A:\SEQUENCE LISTING.txt  
 Output Set: N:\CRF3\09272001\I914549.raw

7896	ctttgtgctt	ttctatattgt	gaaagttaat	tattaggaac	gagctagcaa	atgctacttc	78000
7898	tttttcaaaa	agctaattggc	caatcacagc	aaaaatttaa	agcactaaga	aatacctaca	78060
7900	catattcttc	tattgcccac	ttatatgact	tccataatag	ttgattaaag	gataccggat	78120
7902	tcctttattg	ttgaattaaa	acctcctaca	tgaaaacctt	gatttaggtt	tagaagttgg	78180
7904	taatgttttg	gcattgcaaaa	ccagttaatg	ttctcatcat	tactttttta	aacaatgtta	78240
7906	agagatgaat	tctaggggatt	ataaaaaaaa	aaaagctgta	tgtgttttct	cctataaaaat	78300
7908	ttttcagcat	gattgcttca	gtagaaaaat	taagggaactt	attgatatat	atgtatatga	78360
7910	aggtgaggat	acacatatatac	acacacacat	atatatgtag	gtaaatacat	atattacatg	78420
7912	tctatcaatc	catacatact	cattttattat	acgttttgaa	agcaaccagt	tatagttttg	78480
7914	ttgccatgga	tcattttttac	tattcagtaa	atcagtcaat	tgaagaggct	tgattttatg	78540
7916	gtattagttt	tttggaactt	gtcagcttta	tagtaaat	tgacatctta	caacttccac	78600
7918	tgagattttt	ttgcttgact	aatctgcctt	gatgccaata	agtatatata	cggaaatgga	78660
7920	ctaaaagcaa	atgtgacttg	aagcaccaatt	ttgtaaat	tcttagtgct	tcagtaatac	78720
7922	ttaatactag	tgcatatttag	gtaggaaaaat	tttcagtttg	ttttatttta	aataactata	78780
7924	aatcttatag	ttgcttgat	aaaagaaaca	gataccttta	acatgattaa	atatcaaagt	78840
7926	ctattctctt	caaaatatct	taactaaaga	agcactgcct	gctcttagaa	gttaagcaag	78900
7928	gccataccat	atgctgcgta	catggctttt	aacacaatgg	atattagaaa	cagcctaagg	78960
7930	ctgagcctgg	ctccactatt	tttcagctat	gtgaccatgt	gaaagttaca	tttagtaatt	79020
7932	aaactcattt	cagtagtttg	ctttaagaat	aaaattaggt	actccggggg	catatcaagc	79080
7934	atattgtaaa	acctagtttg	attattattt	gttattggtt	ttactattac	tattctataa	79140
7936	taagtcatgg	gcaggcgagta	gggttacatt	ggaagaattg	cactgtctta	aatatgtcct	79200
7938	ctgtttaact	cacaaactca	gtctacctag	gctttctttg	gaggatctgc	ctttcattgg	79260
7940	ctgtttgact	ttggccaagt	tacttaactt	cttttcactt	cagtttcctc	atctgtgaga	79320
7942	ttatgtgctt	acatgacttc	aggttttggt	ttggctctaa	tatggtatga	ttctatgaaa	79380
7944	tggaaggtta	atacattttg	ctctagtaac	tgtatttgaa	gcacaaatat	taaaaagcac	79440
7946	aattaattct	cattctgagt	ttccattttc	tcttttaaat	taatcattca	gaataaatca	79500
7948	ttttggaaga	gctgcttgat	ccagggtattc	agtagaaatc	actagcatag	catttaattt	79560
7950	ttagacaaaac	tgagaactca	ttaaactgcc	agggtcatgg	acttatatga	gattctcatt	79620
7952	aaatcttaat	gtagataact	cagttaatta	aaacaaatat	ggttgactct	tattaaactt	79680
7954	ctaaagtcaa	aactgcattg	aaattatctg	tacaaagcct	tgttgacctt	tattagagaa	79740
7956	ctgcctctca	aaagacctaa	aagacttatt	tgttcagatc	gagactcttc	atgagccaat	79800
7958	gtgatactct	ccctctattg	ctagatcttc	gcatacagaag	acagcattcc	tctgaaagtg	79860
7960	tttctagtat	caacagtgcc	acaagccatt	ccagtattgg	cagtggtaat	gatgccgact	79920
7962	ccaagaagaa	gaaaaagaaa	aactgggtta	gttaccatcc	ttcatctaat	tcagaagctt	79980
7964	attaatgcat	aatgtgttag	gcctttttct	ttggggcttt	agtgatctgc	agtagtttac	80040
7966	aaaggttccc	attcaagcta	ctgagacctc	aaatgctgca	ctcatcacca	aaattggagt	80100
7968	ggcatgtact	gaaaagcata	catttttaatg	ttgggactaa	acttgggttt	gaatcaccac	80160
7970	tatatctaga	ccttttgagg	ggcctgaatt	ttctaaccac	taaaaagaca	gttaatagca	80220
7972	actataattta	tttgtgaata	tcattttattc	acagatgtta	tctaattttt	ctatagtata	80280
7974	actatacaaaa	ctatgtagta	taactataga	gttataactaa	agaaaaataa	gataacatct	80340
7976	gtgaataaat	ggcttaaaat	aggggtttat	tgtgggcata	gagatgaagg	aaaagtgaag	80400
7978	aatgatgat	gatggtgatg	atgatggtga	tagtggctct	ggaggaaaag	gagaatggga	80460
7980	gttaataaag	ggaagaata	aacaatgaaa	ctctcattcc	acctttggaa	tcgacagggc	80520
7982	ttaccgtgtg	agaatgtttc	ccctaaaaga	aatcaaccac	attagtgtct	gcttgatgtt	80580
7984	tttaaccaag	agaatatagc	agaaatatag	aaatgcactt	taacagaact	gtaccttaag	80640
7986	tttgctagtg	atataattta	tgatattgat	caatagctaa	atagcccagg	ggaagatact	80700
7988	gttactgcga	aaaatttttaa	aacaatggag	tcaatgattt	cttttaatac	caaaaaaaa	80760
7990	atgtagattt	tgagtaata	caactcttga	tgaaatccag	acataattat	cagaggattt	80820
7992	tactggagtg	ctttctacaa	ataatgaaag	aaatatcttt	ttatcttaaa	aaatgtttat	80880

RAW SEQUENCE LISTING  
PATENT APPLICATION: US/09/914,549

DATE: 09/27/2001  
TIME: 12:13:29

Input Set : A:\SEQUENCE LISTING.txt  
Output Set: N:\CRF3\09272001\I914549.raw

7994	acaggtaata	ttttaaaata	ctgatcagcc	ttcattccct	tgatttgtaa	ttccacactc	80940
7996	tttcatgttt	ctgcaagggt	aactctagag	gaagtgaggt	gaanataaac	cgtggacaat	81000
7998	ttggcatgga	tntataaaaa	aacctacct	tgcatgaat	gctatccatt	ttggcagtag	81060
8000	gcttttatac	cttttaaaac	agattacctt	gtatgtcttt	tctttgtgtc	ttttcatttt	81120
8002	aatctcaa	tttaaagaga	tgtaaaacca	ctttctgaat	agagctgtag	gggataccaa	81180
8004	ttctgggttt	gagtagtctg	gggttgga	atttgaatag	aaaaatcaca	attaatgaag	81240
8006	tgtaggtga	atttgatttc	attttgcttt	ttaagtttgt	actgtcagca	ggacatgact	81300
8008	tgattgtagc	gctaaagtgg	ccatttaaaa	caaattgcct	tgaagagaga	agcattggga	81360
8010	atggagatc						81369

## VERIFICATION SUMMARY

PATENT APPLICATION: US/09/914,549

DATE: 09/27/2001

TIME: 12:13:30

Input Set : A:\SEQUENCE LISTING.txt

Output Set: N:\CRF3\09272001\I914549.raw

L:11 M:270 C: Current Application Number differs, Replaced Application Number  
L:13 M:271 C: Current Filing Date differs, Replaced Current Filing Date  
L:15 M:259 W: Allowed number of lines exceeded, <150> PRIOR APPLICATION NUMBER:  
L:17 M:259 W: Allowed number of lines exceeded, <151> PRIOR FILING DATE:  
L:152 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:5  
L:156 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:5  
L:160 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:5  
L:164 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:5  
L:168 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:5  
L:172 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:5  
L:176 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:5  
L:180 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:5  
L:184 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:5  
L:188 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:5  
L:192 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:5  
L:196 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:5  
L:200 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:5  
L:205 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:5  
L:209 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:5  
L:213 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:5  
L:217 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:5  
L:221 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:5  
L:225 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:5  
L:229 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:5  
L:233 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:5  
L:237 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:5  
L:241 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:5  
L:245 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:5  
L:249 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:5  
L:253 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:5  
L:257 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:5  
L:261 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:5  
L:265 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:5  
L:269 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:5  
L:273 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:5  
L:277 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:5  
L:281 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:5  
L:285 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:5  
L:445 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:7  
L:449 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:7  
L:453 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:7  
L:457 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:7  
L:461 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:7  
L:465 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:7  
L:469 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:7  
L:473 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:7  
L:477 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:7  
L:481 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:7



## VERIFICATION SUMMARY

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Input Set : A:\SEQUENCE LISTING.txt

Output Set: N:\CRF3\09272001\I914549.raw

L:485 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:7  
L:489 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:7  
L:493 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:7  
L:497 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:7  
L:501 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:7  
L:505 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:7  
L:5293 M:250 E: Invalid Numeric Identifier, INVALID IDENTIFIER  
L:5295 M:282 W: Numeric Field Identifier Missing, <212> is required.